CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, December 9, 1909.

CONTENTS.

CONSTRUCTION NEWS:
Plans and Specifications on File.... 201
List of Contracts Pending..... 201
Railways 201
Electric Railways 202
Light and Power Plants..... 203
Bridges 203
Buildings 204
Water Supply and Irrigation..... 205
Sewerage 206
Streets and Roads 206
Manufacturing Plants 207
Miscellaneous Contracts 207
Foreign Contracts 207
PROPOSALS 208

CONSTRUCTION NEWS.

Plans and Specifications on File.

(denotes that this work is advertised in Engineering News.)*

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	See issue.
1- 8	Dredging, quay walls, New York.....(S.)	12- 9
12-13	Pumping station, Kansas City, Kan.....(S.)	11-25
12-13	Pumping engine, Kansas City, Kan.....(S.)	11-25
12-14	Pump-house, Ft. Logan, Colo.(S.)	11-18
12-15	Drainage, Fremont, Neb.....(S.)	12- 2
12-16	Equipment, Columbus, O.....(S.)	11-18
12-18	R. R. system extension, California (Rys.) .....(S.)	11-18
12-18	Impvts. to pier, Boston, Mass.(S.)	11-25
12-24	Tile work (Bldgs.), Vallejo, Cal.....(S.)	11-25
12-24	Building, Washington, D. C. (S).12-	2
12-31	Building, Vallejo, Cal.....(S.)	12- 2
1- 5	*Floating dock, Vicksburg, Miss. .....(S.)	12- 2
1-17	*Irrigation, Porto Rico...(P. & S.)	10-21

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

12-10 Gas and elec. fixtures, Woodville, Pa 12- 9
12-13 Street lighting, Sacramento, Cal.12- 9
12-13 Lighting fixtures, New York, N.Y.12- 9
12-14 Trans. lines, Richmond, Va.....11-25
12-14 Street lighting, Nanticoke, Pa....12- 2
12-15 *Power plant, Kings Park, N. Y..12- 2
12-15 Gas and elec, fixtures, Brooklyn, N. Y 12- 9
12-16 Light system, Marion, Kan.....12- 9
12-16 Equipment, Columbus, Ohio.....11-18
12-18 Power plant, San Francisco, Cal..11-11
12-20 Wiring system, Toledo, Ohio.....11-25
12-20 Lighting fixtures, Indianapolis, Ind. 12- 9
12-27 Light system, Fort Washington, Md. 12- 9

BRIDGES.

12-11 Bridge, Buckingham, Va.....12- 9
12-14 Bridge, Sibley, Mo.....12- 9
12-14 Bridge, Mansfield, Ohio.....11-25
12-14 Trestle, New York.....12- 2
12-15 Bridge, Buffalo, N. Y.....12- 2
12-15 Viaduct, Tacoma, Wash.....12- 9
12-17 Bridge, Lockland, Ohio.....12- 2
12-20 Bridges, Colfax, Wash.....12- 2
12-28 Bridge, Hebron, Neb.....12- 9
1- 4 *Bridge, Merced, Cal.....11-25
1-11 Bridges, York, Neb.....12- 9

BUILDINGS.

12-10 *Quarters, Ft. Morgan, Ala.....11-11
12-13 Schools, New York.....12- 2
12-14 Dormitory, etc., Waukesha, Wis..12- 9
12-14 Parliament bldgs., Toronto, Ont..12- 9
12-15 School, Baltimore, Md.....12- 9
12-15 Marble work, Washington, D. C..12- 9
12-15 Asylum, Salem, Ore.....12- 2
12-15 *Post-office, Davenport, Ia.....11-25
12-16 Dwellings, Wheeling, W. Va.....11-16
12-16 Panels, New York.....12- 9
12-17 Engine house, New York.....12- 9
12-17 Plans, Milwaukee, Wis.....12- 9
12-20 Municipal building, New York....12- 9
12-20 Y. M. C. A. bldg., Lincoln, Neb..12- 9
12-20 Heating, etc., Toledo, Ohio.....11-18
12-20 *Wiring, etc., Toledo, Ohio.....11-18
12-20 Chapel, etc., Des Moines, Ia.....12- 2
12-20 Court-house, Estancia, N. Mex...12- 2
12-20 Schools, New York.....12- 9
12-21 Platform, etc., Washington, D. C.12- 2
12-21 Barracks, Jefferson Barracks, Mo.12- 9
12-22 Cottages, Central Islip, N. Y....12- 2
12-22 Building, Springfield, Mass.....12- 9
12-22 Alterations, San Francisco, Cal..11-25
12-24 Tile work, Vallejo, Cal.....11-25
12-24 Building, Washington, D. C.....12- 2
12-28 *Post-office, Athens, Ohio.....11-18
12-29 *Heating, Denison, Tex.....11-25
12-29 Plumbing, etc., Denison, Tex....11-25
12-29 Post-office, Beatrice, Neb.....11-25
12-30 Shed, Ft. Riley, Kan.....12- 9
12-31 Building, Vallejo, Cal.....12- 2
1- 6 Post-office, Trenton, N. J.....12- 2
1-10 *Post-office, Lima, Ohio.....12- 2
1-10 *Storehouse, Ft. Monroe, Va.....12- 9
1-11 Post-office, Chester, Pa.....12- 9
1-12 *Post-office, etc., Bristol, Tenn....12- 2
1-13 *Post-office, Manchester, N. H....12- 9

WATER-WORKS.

12-10 Boilers, Minneapolis, Minn.....12- 2
12-10 Mains, New York.....12- 9
12-13 Pumping engine, Kansas City, Kan. 11-25
12-14 Pump house, Fort Logan, Colo...11-18
12-14 Water mains, New York.....12- 9
12-14 Pumping units, Mt. Kisco, N. Y.12- 9
12-15 Well, Stoughton, Wis.....12- 9
12-15 Pumping station, San Francisco, Cal. 12- 2
12-15 Standpipe, Belden, Neb.....11-11
12-15 Water system, Sultan, Wash....12- 9
12-16 *Siphon, etc., New York.....12- 2
12-16 *Boiler equip., Grand Rapids, Mich.12- 9
12-16 Pipe line, Buffalo, N. Y.....12- 9
12-17 Cisterns, Fort Dade, Fla.....12- 9
12-17 Water pipe, Minneapolis, Minn..12- 2
12-20 Water-works, Atlanta, Tex.....12- 9
12-21 Dam, New York.....12- 9
12-23 Well, Fort Sill, Okla.....12- 9
12-28 *Engine-room, Detroit, Mich.....12- 2
12-29 Water supply, Philippines.....11-18
1- 1 Water-works, Foley, Minn.....11-11

SEWERS.

12-10 Sewers, Elmwood Place, Ohio....11-18
12-10 Sewer system, East St. Louis, Ill.12- 9
12-11 Sewer, Oklahoma City, Okla.....12- 9
12-11 Sewer, Chicago, Ill.....12- 9
12-13 Sewers, Pittsburg, Pa.....12- 9
12-13 Sewer, Carson City, Nev.....11-25
12-13 Sewers, Houston, Tex.....12- 2
12-14 Sewer, Clinton, Iowa.....12- 9
12-14 Sewers, Chicago Heights, Ill....12- 9
12-15 Sewer bonds, Sebring, Ohio.....11-25
12-16 Sewers, Guthrie, Okla.....12- 9
12-16 Sewers, New York.....12- 9
12-17 Sewer, Louisville, Ky.....12- 2
12-20 Sewage disposal works, Oklahoma City, Okla 12- 9
12-21 Sewer materials, Providence, R. I.12- 9
12-21 Sewer system, Blackfoot, Idaho..12- 9
12-24 *Sewer, Louisville, Ky. 12- 9
12-29 Sewer mains, Newburg, Ohio....12- 9
12-31 *Sewer, Louisville, Ky. 12- 9
1- 3 Sewer, Muskegon, Mich.....12- 9
1- 5 *Sewage machinery, Detroit, Mich.12- 9

STREETS AND ROADS.

12-10 Macadam, Phoenix, Ariz.....12- 2
12-10 Paving, East St. Louis, Ill.....12- 9
12-10 Street impvt., Dubuque, Ia.....12- 9
12-13 Paving, Pittsburg, Pa.....12- 9
12-13 Grading, etc., Cincinnati, Ohio...12- 9
12-13 Macadam, etc., Las Cruces, N. Mex 12- 9
12-13 Macadam, Stockton, Cal.....12- 9
12-14 Paving, New York.....12- 9
12-15 Paving, etc., St. Petersburg, Fla.12- 9
12-16 Paving, New York.....12- 9
12-16 Road, Flemington, N. J.....12- 2
12-17 Paving, Shawnee, Ohio.....12- 2
12-18 Pavement, Piper City, Ill.....12- 2
12-18 Road, Golden, Colo.....12- 2
12-20 Grading, etc., Arlington, Va....12- 2
12-20 Paving, Huntsville, Ala.....12- 2
12-20 Street impvt., Bowling Green, O..12- 2
12-22 Paving, etc., New York.....12- 9
12-24 *Paving, sidewalks, Salt Lake City, Utah 12- 9
1- 5 *Macadam, etc., Lenoir, N. C....12- 9
1- 5 *Road, Jacksonville, Fla.....12- 9

MISCELLANEOUS.

12- 9 Dredging, St. Paul, Minn.....12- 9
12-10 Pier, Philadelphia, Pa.....11-18
12-13 *Dredging, Wilmington, Del.....11-18
12-13 Masonry, earthwork, National Rys. of Mexico 11-25
12-13 Pier, New York, N. Y.....12- 9
12-13 Ditch, Hartford City, Ind.....12- 9
12-14 Naval supplies, Wash., D. C....12- 9
12-14 Dredging, Columbus, Ohio.....12- 2
12-15 *Dredging, etc., Chicago.....12- 2
12-15 Drainage, Fremont, Neb.....12- 2
12-15 Ditches, Webster City, Iowa.....12- 9
12-16 Pipe fences, New York, N. Y....12- 9
12-16 Grass sod, New York, N. Y.....12- 9
12-16 Lumber, piles, New York, N. Y..12- 9
12-18 Impvts. to Pier, Boston, Mass....11-25
12-18 R. R. system extension, California (Rys.) 11-18
12-21 Cement, Providence, R. I.....12- 9
12-22 Dredge, Portland, Ore.....12- 9
12-22 *Ditch, Selma, Ohio.....12- 9
12-22 Canals, Tallahassee, Fla.....12- 9
12-22 Fire hose, San Francisco, Cal....12- 2
12-24 *Rollers, Jacksonville, Fla.....12- 9
12-27 *Lumber, Nashville, Tenn.....11-25
12-28 *Barge canal, Albany, N. Y.....12- 2
12-30 Ditch, Hamburg, Iowa.....12- 2
12-31 Levee, Charleston, Mo.....12- 9
1- 3 Dredge, Panama 12- 2
1- 4 *Dredging, Michigan City, Ind....12- 9
1- 5 *Floating dock, Vicksburg, Miss..12- 2
1- 8 Dredging, quay walls, New York.12- 9
1-17 *Irrigation work, Porto Rico.....10-21
1-18 Dry dock, New York.....10-21
2- 1 (1910) Monuments, Ottawa, Ont.10-21

FOREIGN CONTRACTS.

12-10 Competitive plans, Argentina....11- 4

EXAMINATIONS.

12-11 Bridge Designer, Albany, N. Y..11-18
12-11 Bridge Draftsman, Albany, N. Y.11-18
12-11 Junior Bridge Draftsman, Albany, N. Y. 11-18
12-14 Asst. Geologist, Wash., D. C....11-18
12-14 Assistant, Wash., D. C.....11-18
12-14 Mechanical draftsman, Portland, Ore.....12- 2
12-15 Steam Engr., Wash., D. C.....11-18
12-15 Physical Laboratory Aid, Pittsburg, Pa. 11-18
12-15 Dynamo Tender, Ellis Island, N. Y. 11-18
12-15 Electrician and Plumber, Angel Island, Cal. 11-18
12-15 Inspector of Hardware, St. Louis, Mo. 11-18
12-29 Asst. and Teacher, Philippines...11-18
1-12 Inspector, New York, N. Y.....12- 2

RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ASHEVILLE & EAST TENNESSEE.—An extension will be built from Weaverville, N. C., via Stockville, a distance of seven miles, including two bridges. B. M. Lee, of Asheville, N. C., is Engr. Noted on Oct. 7.

BANGOR & AROOSTOOK.—The Fort Kent-St. Francis division of the Bangor & Aroostook Railroad system has been formally approved by the Railroad Commissioners and will open for traffic at once. The new line is about 17 miles in length.

CHICAGO & NORTHWESTERN.—See item under South Dakota.

CHICAGO, MILWAUKEE & PUGET SOUND.—See item under South Dakota.

CLARKSDALE & MISSISSIPPI RIVER.—Survey has been completed, right-of-way secured and bids have been asked for constructing this line which will extend from Clarksdale, Miss., to a point on the Mississippi River. Noted on Nov. 25.

COAHUILA, CHIHUAHUA & NORTHWESTERN.—We are officially advised that contracts will be let about Jan. 1, 1910, for building the proposed extensions from Monclova to San Blas, Jaco, Julimes and Chihuahua, 360 miles. Preliminary surveys have been made. T. S. Abbott is Ch. Engr., Saltillo State of Coahuila. Noted on Nov. 4.

COOS BAY, OREGON & IDAHO.—Francis H. Clarke, of Marshfield, Ore., has filed in the U. S. Land Office, a plat of the first 20 miles of survey of the Coos Bay, Oregon & Idaho Railroad. Survey covers the most difficult part of the route from this side of Camas Valley toward Myrtle Point. The total tunneling is 16,600 ft.; the longest tunnel is 600 ft. Noted on May 6.

DULUTH, RAINY LAKE & PACIFIC.—An officer of the Duluth, Winnipeg & Pacific writes that contracts are about to be let for building from Virginia, Minn., south to Duluth, 74.4 miles, according to the "Railroad Age-Gazette." Address H. T. Hasen, room 619, Lyceum Bldg., Duluth.

DULUTH, WINNIPEG & PACIFIC.—See Duluth, Rainy Lake & Pacific.

GULF & NORTHWESTERN.—Surveys are being made from Sterling, Colo., southeast to Oklahoma City, Okla., 620 miles. E. F. Collins is Ch. Engr., Goodland, Kan.

IDAHO NORTHERN.—Two branch lines are to be contsructed in northern Idaho. One will extend from three miles above Enaville, 15 miles up the Little North Fork of the Coeur d'Alene River, and the other will begin at the mouth of Beaver Creek, and extend ten miles into the Sunset mining district. This railroad now runs from Enaville, Idaho, on the Oregon R. R. & Navigation line, to Paragon, 33 miles. E. P. Spalding is Gen. Mgr., Wallace, Idaho.

KINSLEY, SCOTT CITY & DENVER AIR LINE.—Surveys have been made, it is stated, to build from Andale, Kan., to a point in Pratt county with a branch to the Missouri Pacific. The line is eventually to be extended northwest from Kinsley, Kan., to Jetmore, and to Scott City, thence to Denver, Colo. It has not been decided whether the tracks of the Missouri Pacific will be used from Wichita, Kan., to Andale, or a new line built between these places. W. F. Brown is Pres., Norton, Kan.; R. E. Edwards is Treas., Kinsley.

MEXICO NORTH-WESTERN.—R. N. DUDLEY, of Chihuahua, State of Chihuahua, has been awarded the contract for the construction of 40 miles of new line being built by the Mexico Northwestern Railway Co., from the company's lumber town of Madera toward Terrazas, on the Rio Grande, Sierra Madre & Pacific R. R., belonging to the same company, and work will begin at once. See item in issue of Nov. 11.

MINNEAPOLIS & ST. LOUIS.—See item under South Dakota.

NATIONAL RAILWAYS (of Mexico).—It will cost $2,000,000 Mexican currency and more than two months additional time to repair the damage that was done to the lines of this system in the vicinity of Monterey, and between Monterey and Saltillo by the floods of last August, it is stated. This heavy outlay is additional to the cost of rebuilding about 60 miles of the Matamoros-Monterey line and a large part of the division between Monterey and Tampico. The roadbed between Monterey and Saltillo is being completely changed for one-half the distance or more than 30 miles. The fact that the old line crossed and recrossed the Santa Catarina canyon down which the flood came made it receive the brunt of the disaster. The new roadbed is being built around the mountains and high up along the ledges of the canyon. J. M. Reid is Ch. Engr., Mexico City.

PARIS & MOUNT PLEASANT.—We are officially advised that the board of directors has announced that financial arrangements have been definitely made and actual construction will begin prior to Jan. 1, 1910, and work pushed to completion as rapidly as possible. The line will extend through portions of Lamar, Red River, Franklin, and Titus Counties, to Mt. Pleasant Tex., a distance of 53 miles. R. F. Scott is Pres.; H. P. Mayer, Vice-Pres. and Gen. Mgr.; N. H. Ragland, Secy. and Gen. Agent; R. J. Murphy, Treas.; H. P. Mobberly, Ch. Engr., Paris, Tex. Noted on June 24.

PENNSYLVANIA R. R.—We are officially informed that this company has invited bids for the construction of an entirely new line through Bristol, Pa., to eliminate ten grade crossings. A blueprint of the proposed work is on file at the office of Engineering News, New York. The present line of the Pennsylvania Railroad through Bristol is on a heavy curve running through the center of the city. The proposed line will go straight through the western part of the city. The new line will be located about one-half mile west of the present station in Bristol. It will be 2¼ miles long, and will necessitate the building of about nine miles of track to prepare for a four-track railroad. Nine bridges will be built over streets and public roads, one bridge will be built over the Pennsylvania Canal, and three over streams. To do this will require the grading of 550,000 cu. yds. of earth, the building of 5,000 cu. yds. of arch masonry, and 12,000 cu. yds. of bridge masonry. All the bridges will be built of concrete and they will be reinforced over all streets to provide solid floors for tracks. There are at present in Bristol, Pa., ten grade crossings in the center of the city. These will be done away with on the main line. It is now thought that only two of the present four tracks will be left, and they will be kept in service as siddings to serve local industries in that section of Bristol. There will be no grade crossings on the new line. The Pennsylvaia R. R. Co. in the past ten years has been eliminating grade crossings on its main line as rapidly as practicable and in that time, on the New York Division alone, 78 crossings at grade have been abolished. With the crossings to be eliminated by the new line through Bristol, there will have been removed since Jan. 1, 1900, on the New York Division a total of 88 grade crossings. The majority of the crossings remaining are over country roads in sparsely settled sections, where the travel is inconsiderable.

SALEM, FALLS CITY & WESTERN.—S. B. Taylor, Ch. Engr., Dallas, Ore., advises regarding the item concerning this railway in the issue of Nov. 18, that this railway was built from Dallas, Ore., west to Falls City and Black Rock, a distance of 13 miles, in 1902-3. During the past year it has been extended east to Salem, a distance of 14 miles. The line is to be extended west from the present western terminal, Black Rock, to Siletz Bay, about 35 miles. Preliminary surveys are made for the entire distance and the line has been located for the first seven miles. No construction work will be undertaken until next spring. All construction work in the past has been done by the company's forces under the direction of the engineering department and the extension probably will be done the same way.

SOUTH DAKOTA.—Samuel H. Lea, State Engr., Pierre, S. Dak., advises us that the following work is proposed in South Dakota:

Chicago, Milwaukee & Puget Sound Ry.—Two lines under construction west of Missouri River in Corson, Dewey, Armstrong, Schnasse and Meade Counties; aggregating about 155 miles.

Chicago & Northwestern Ry.—The following extensions: James River Valley & Northwestern from Blunt, S. Dak., north to Gettysburg, with a branch from Oneida east to Hitchcock, in all 125.5 miles of road; Belle Fourche Valley R. R., from Belle Fourche easterly and southeasterly to a connection with the Pierre, Rapid City & Northwestern, a distance of 88 miles. Surveys have been completed between Belle Fourche and the eastern portion of Meade County, but the route has not been determined east from Meade County. Surveys are now being made for this portion. An extension from Dallas westerly through Tripp County, a distance of 39.12 miles. An extension from Iroquois to Doland, a distance of about 37 miles.

Surveys have been made for the following lines: Minneapolis & St. Louis R. R., west from LeBeau along the valley of Moreau River. From Aberdeen to Pierre along the route surveyed and graded about 20 years ago. This old grade is under option until July 1, 1910, to the M. & St. L. R. R.

An electric railroad from Sioux City, Iowa, to Bijou Hills, S. Dak. An electric railroad from Sioux Falls, S. Dak., to Brookings. Also an electric railroad from Sioux Falls to Bridgewater.

A revised railroad map of South Dakota, on which are shown the proposed new lines of railroad, is on file at the office of Engineering News, New York. Mr. Lea states that "there will undoubtedly be considerable activity in railroad construction during the coming year. There are short extensions proposed, but these are not shown on the railroad map for the reason that surveys have not yet been started on same."

ELECTRIC RAILWAYS.

RUTLAND, VT.—The Rutland Ry., Light & Power Co. will make a survey from Castleton to Poultney for an extension. The Powers & Mansfield Co., Troy, N. Y., will have charge of the engineering work, and will prepare plans of the levels and grades of the road. As soon as the proposed line is agreed upon, the company will take measures to secure the right-of-way to go on with the work of building. J. Loftus is Ch. Engr., 28 Center St., Rutland.

WHITE PLAINS, N. Y.—The New York, New Haven & Hartford R. R. Co. has filed with the County Clerk of Westchester County a certificate of incorporation of the Westchester Railroad Co., capitalized at $1,000,000. The New York, New Haven & Hartford Co. bought the property and franchises of the Tarrytown, White Plains & Mamaroneck

Ry. in foreclosure proceedings brought by the Knickerbocker Trust Company, as trustee of the trolley company. The route of the new road will be the same. The Directors are Richard Sutro, William Greenough, John G. Parker, New Haven, Conn.; Charles M. Sheafer, Jr., William L. Barnett, John L. Anderson, Augustus S. May, New Haven; Frank E. Hall and Edward O. Brown. Noted on Nov. 11 and Oct. 14.

BROOKLYN, N. Y.—Plans, representing an approximate expenditure of $50,000,000, are under consideration by the Brooklyn Rapid Transit Co., which are to be submitted to the Public Service Commission, First District, according to the Brooklyn "Eagle." Briefly stated, the comprehensive development scheme proposed by the B. R. T. is as follows: (1) To equip and operate the Fourth Ave. subway. (2) To extend its Fifth Ave. elevated line, as an elevated road, to Fort Hamilton. (3) To elevate its West End line from Coney Island to 18th Ave., and to depress the tracks from that point north to 43d St., where they will run into the Fourth Ave. subway. (4) To elevate its Sea Beach road from Coney Island to the point where it joins the West End line. (5) To elevate its Culver line for its entire length. (6) To extend its Brighton Beach division, as already announced, by subway to Flatbush Ave. and Fulton St., and thence via the Fourth Ave. subway, the Manhattan bridge and the Canal St. subway in Manhattan, to a loop at the North River. (7) To third-track its Fulton St. line. (8) To third-track its Lexington Ave. line. (9) To third-track its Broadway line. (10) To make various extensions to its elevated system in the Eastern District with a view to furnishing the East New York and Ridgewood sections with a much better transportation service than now exists. J. F. Calderwood is Gen. Mgr.; W. S. Menden is Asst. Gen. Mgr. and Ch. Engr., 85 Clinton St., Brooklyn.

NEWARK, N. J.—The Pennsylvania R. R. Co. has filed plans for an electric branch line from Park Pl., Newark, N. J., to Harrison, N. J., with the Secretary of State at Trenton, N. J. The plans include the electrification of the existing line between Harrison and Jersey City. The railroad company will also erect a new station at Park Pl. and Saybrook Pl., Newark. The plans for the station have not yet been completed. The present main line station at Market St. will be continued in active operation. The new line will furnish direct electric train service between Newark and the Hudson Terminal Building in Manhattan. Passengers can also transfer at the new station in Harrison for the new Pennsylvania Station, at Seventh Ave. and 33d St., Manhattan Boro., New York, and points on the Long Island Railroad. Through trains for the Seventh Ave. station will stop at Harrison to allow passengers for points in lower New York to take trains for the Hudson Terminal.

SLIPPERY ROCK, PA.—The Slippery Rock & Grove City St. Ry. Co. is ready to begin construction on its proposed line which is to connect Slippery Rock and Grove City, as noted on Oct. 21. The line will be nine miles long. H. B. Groves, of Butler, Pa., is Engr.

McKEESPORT, PA.—The McKeesport Belt Line St. Ry. Co. has been chartered to build a 2-mile street railway around McKeesport. Capital stock, $12,000. Directors: S. D. Foster, Pres.; D. A. Foster, A. D. Foster and W. E. Hartman.

PIEDMONT, W. VA.—J. P. J. O'Brien, of Wheeling, W. Va., is reported to be negotiating to secure the franchise to build a trolley line from Piedmont to Bloomington, Md. The franchise, which has been granted Wheeling parties, expires Dec. 15. No effort toward building the line, which would pass through Luke, Md., and Beryl, W. Va., has been made. Mr. O'Brien agrees for his clients to give $5,000 bond to complete the line within one year and to pay $200 a year for the franchise. Two bridges would have to be built over the North Branch of the Potomac River, one crossing the tracks of the Western Maryland R. R. and the bridge between Piedmont and Luke would have to be rebuilt.

MEMPHIS, TENN.—We are officially informed that the Tennessee Traction Co. will make surveys soon for its proposed railway from Memphis to Jackson and Nashville, a distance of 210 miles. Right-of-way is partly obtained. Geo. E. Bushnell is Gen. Mgr. and Ch. Engr., Memphis. Noted on Nov. 11.

JANESVILLE, WIS.—The Janesville St. Ry. has been sold to a syndicate of New York capitalists. Extensions probably will be constructed. Wm. Murphy, Janesville, is Gen. Mgr.

IOWA CITY, IOWA.—The Iowa City, Ottumwa & Southeastern Electric Ry. Co. has been incorporated in South Dakota to build an electric railway from Iowa City to Ottumwa, Iowa, a distance of 80 miles. The new company has nominal headquarters at Pierre, S. Dak., with a business office in Iowa City. Capital stock, $2,500,000. Incorporators: S. J. Smith, Roscoe Wilson and Frank Farmer, of Iowa City, and G. P. Peterson, Pierre, S. Dak. Noted on Nov. 25.

The Iowa City Elec. Co. plans to build a 4-mile line in this city. S. A. Swisher is Pres.; J. O. Schultze, Vice-Pres. and Mgr.; D. A. Reese, Secy.; Lovall Swisher, Treas.

DAVENPORT, IOWA.—The stockholders of the Davenport & Manchester Interurban Ry. Co. will hold a special meeting at Monticello to increase the capital stock to $650,000. The company proposes to build an electric railway between Davenport and Manchester, as noted on Oct. 28.

FORT DODGE, IOWA.—The CONSOLIDATED TRAMWAY CO., Roanoke, Va., has been awarded a contract for building 1½ miles of aerial tramway across the Des Moines River for the Plymouth Clay Products Co.

MANKATO, MINN.—J. D. Browning, of Spirit Lake, Iowa, and B. C. Wooley, of Sioux City, Iowa, with headquarters in the National Citizens' Bank Bldg., Mankato, have prepared plans for the proposed electric railway between Mankato and St. Paul and Minneapolis.

PIERRE, S. DAK.—See "South Dakota" item under Railways.

JEFFERSON CITY, MO.—We are officially advised that the contract for the construction of the interurban line of the North Missouri Central Railway Co., from Jefferson City, via Columbia, to Mexico, Mo., has been awarded to the M. A. TALBOTT CO., Baltimore, Md. Contracts for material and supplies are now being let and active work will begin as soon as the weather permits. The line will be 60 miles long. The headquarters of the company are at St. Louis, Mo., in the National Bank of Commerce Bldg.

SAN ANTONIO, TEX.—The Metropolitan Steam & Electric Railway Co. has been incorporated in Delaware to build electric railways connecting San Antonio, New Braunsfels, Seguin, Lockhart, Gonzales and Austin, 80 miles. John G. Marmion, of San Antonio, Tex., is Pres.; E. L. Squire, of Wilmington, Del., Vice-Pres.; M. Kaufman, Secy. and Treas., Yorktown, Tex. Charles H. Russell is Engr., San Antonio. Ultimately the line may be extended from Austin to Houston, Tex.

DALLAS, TEX.—Preliminary organization has been effected to incorporate the East Texas Traction Co., which will build an interurban railroad from Dallas to Terrell, Tex. The following trustees were chosen: W. H. Gaston, R. H. Stewart and Alexander Sanger, of Dallas; Thomas Layden, of Forney, and W. P. Allen, of Terrell, Tex. Schuyler Marshall was elected Pres. and C. L. Wakefield Secy.

OKLAHOMA CITY, OKLA.—Contract has been awarded to J. R. ALLEY, of Oklahoma City, for a 10-mile extension of the Oklahoma City & Suburban Ry. from Capitol Hill to Moore, Okla., it is stated. This line was noted fully on Nov. 18.

The Citizens' Traction Co., noted last week, is a consolidation of the Oklahoma Interurban Co. and the line being constructed by the Oklahoma City Land & Development Co. About seven miles are completed and in operation, and an additional four miles are under construction. The railway now in operation and that under construction is to be operated as a city and suburban system and also terminus of an interurban line between Oklahoma City and Shawnee. Power is being rented from the Oklahoma City Gas & Electric Co. Capital stock, authorized and issued, $300,000; bonds authorized, $175,000. L. E. Patterson is Pres.; J. F. Winans, Secy. and Treas.; Alfred Hare, Gen. Mgr. and Purchasing Agent.

EUREKA, CAL.—See item under Manufacturing Plants.

SACRAMENTO, CAL.—The Vallejo & Northern R. R. Co. is the successor, it is announced, to the Vallejo & Northern Elec. Ry. Co., noted last week. The company will build from Sacramento to Woodland, Davis, Suisun, Vacaville, Fairfield, Dixon, Winters and Vallejo, at which point steamboat connection will be made for San Francisco. The line will be 110 miles in length. The overhead trolley will be installed on the city lines and the third rail will be used on the interurban lines. Capital stock authorized, $2,500,000. T. T. C. Gregory, Fairfield, is Pres. and Gen. Mgr.; W. R. Madden, Fairfield, Vice-Pres.; Wm. Pierce, Suisun, Secy.; E. D. Holly, Suisun, Treas.

LIGHT AND POWER PLANTS.

PORTLAND, ME.—The Ram Island Power Co. has been organized to furnish electricity for lamps, heat and motors in Lewiston, Auburn, Minot, Greene, Turner, Leeds, Livermore, East Livermore and Jay, with a capital of $100,000. Roscoe T. Holt, of Portland, is Pres.; John H. Ridge, of Portland, is Treas.

CONCORD, N. H.—The Board of Directors of the Concord & Montreal R. R. Co. have voted to authorize the president to petition the State Railroad Commissioners for permission to sell 2,500 shares of its stock to pay for and improve the electric light plant acquired in Franklin.

NEW YORK, N. Y.—Bids will be received by the Department of Public Charities, New York, Robert W. Hebberd, Commissioner, until Dec. 13, for the lighting fixtures and all other work in connection therewith, for a hospital pavilion, New York City Home for the Aged and Infirm, Blackwells Island. Raymond F. Almirall is Arch., 51 Chambers St., New York.

BROOKLYN, N. Y.—Bids will be received by Bird S. Coler, Boro. Pres., until Dec. 15, for furnishing material and installing gas and electric fixtures for the public bath, Fourth Ave. and President St., Brooklyn.

WILLARD, N. Y.—Contract for the installation of an engine and generator in the Willard State Hospital has been awarded to GEORGE SYKES, 1123 Broadway, New York, at $3,440.

ISLIP, N. Y.—The Islip Electric Light Co. has been incorporated by William H. Moffitt, Frank Creamer and John H. Vail, all of Islip, N. Y., with a capital of $20,000, for the purpose of furnishing electricity for lamps, heat and motors.

MOUNT KISCO, N. Y.—See item under Water Supply—Irrigation.

*ORANGE, N. J.—The Common Council on Nov. 22 awarded contract for the municipal lighting plant and system, bids opened on Nov. 8, to STORMS & CO., of Newark, at $87,639, without the underground distributing system in Main St. The Street Committee recommended that this additional expense would be unwarranted. Runyan & Carey are Engrs., 112 Market St., Newark.

WOODVILLE, PA.—Bids will be received until Dec. 10 by R. J. Cunningham, County Controller, Pittsburg, for the gas and electric fixtures for men's dormitory and buildings 1, 2 and 3 of administration group, Allegheny County Home; also tunnel, sewer and water lines connecting all buildings.

NEW CASTLE, DEL.—The American Power Co. has applied for a franchise to erect transmission lines from New Castle to Rogers' Corner, to Clarke's Corner, and to Delaware City for the distribution of electricity for lamps, heat and motors in Delaware City, Fort Du Pont and to residents along the route.

FORT WASHINGTON, MD.—Bids will be received by Capt. H. L. Pettus, Constructing Q. M., U. S. A., Takoma Sub-Station, Washington, D. C., until Dec. 27, for the construction of an electric lighting system here.

RICHMOND, VA.—The Finance Committee has recommended to the Council an appropriation of $65,000 for the construction of the distributing system in connection with the new electric light plant. This appropriation is in addition to the bond issue of $350,000 provided for the erection of the plant and for the installation of water pumps at the new pump house. Total appropriation for the plant and water pumps, $415,000.

NEW MARTINSVILLE, W. VA.—The New Martinsville Electric Light, Heat & Power Co., R. E. Hall, Supt. and Ch. Engr., has been granted franchise to furnish electricity for lamps in Brooklyn Junction. Service is expected to be ready by Jan. 1, 1910.

FRANKLIN, N. C.—Preparations are being made by Henry O. Cozad for the construction of an electric light plant. A dam is being built across Cartoogechaye Creek to develop from 200 to 300 HP.

BEAUFORT, S. C.—The proposed electric light plant to be constructed here will cost $18,000. R. A. Long and W. F. Marscher, of Beaufort, are Engrs.

SENOIA, GA.—W. B. Baggarly, H. L. Ware, A. O. Baggarly, J. A. McKnight and others are organizing a company here to establish and operate an electric light plant. They will petition the City Council for a franchise.

MARIANNA, FLA.—The proposition to issue $10,000 of bonds for consolidation and improvement of the electric light plant and water-works system will be submitted to popular vote.

LAKELAND, FLA.—On Nov. 22 the citizens voted to issue $65,000 of bonds for the construction of a new electric light plant and extensions to the water-works system.

PARIS, KY.—The Paris Electric Co., S. L. Allen, Purchasing Agt., proposes to make extensions to its present lighting plant, to include boilers, engines, generators, feed-water heaters, pumps, etc. Estimated cost, $20,000.

FRANKFORT, KY.—Bids were opened on Nov. 17 by the Board of Regents, Kentucky Normal and Industrial Institute, care of Anderson & Frankel, Engrs., Lexington, for heating and lighting the Trades and Auditorium Buildings on the campus. Contracts have been awarded as follows: Heating plant, consisting of boiler room equipment, and the heating pipes and radiation, etc., to A. J. ANDERSON & Co., engine, generator, switchboard and electric wiring and fixtures, etc., to HARRY I. WOOD; lighting of the campus to MARINE ELECTRIC CO.

COSHOCTON, OHIO.—Preparations are being made by the Coshocton Light & Heating Co., F. H. Smythe, Ch. Elecn., for the installation of two new generating units, with a combined rating of 1,200 HP., together with equipment for auxiliary power plant.

COLUMBUS, OHIO.—Plans submitted by Samuel Hannaford, Arch., for heating and electrical work and for boilers for the power plant of the contagious group of the new city hospital on Burnett Ave., have been approved. Bids for installing the power plant will be asked soon. The plant will furnish electricity for lamps and motors and heat for all buildings at the hospital.

INDIANAPOLIS, IND.—Bids will be received until Dec. 20 by the Board of Public Works for furnishing and hanging complete all electric lighting or gas lighting fixtures in the new City Hall.

INTERNATIONAL FALLS, MINN.—We are officially advised that the MINNEAPOLIS STEEL & MACHINERY CO., Minneapolis, Minn., have just completed furnishing and erecting the steel work for the water power development and paper mill at International Falls, for the Minnesota & Ontario Power Co., requiring in all about 2,500 tons of steel. This work included power house on both the Canadian and American sides of the Rainy River, and boiler house and pulp and paper mill on the American side. The pulp and paper mill includes the following connected buildings: Digester house, mixing room, screen room, machine room and finishing room. This company is also building for this plant a 200,000-gallon steel water tank on 125-ft. tower, pulp tank 48 ft. high, 45 ft. diameter and two 33 ft. diameter 33 ft. high chip tanks which go on top of the digester house.

MARION, KAN.—Bids will be received by the City Clerk until Dec. 16 for furnishing material and labor for the construction of an electric lighting and water-works system.

HETTINGER, N. DAK.—C. A. Meyer, of Clarkfield, Minn., is contemplating the installation of an electric light plant here.

CONRAD, MONT.—Plans are being prepared by C. T. Sacker and C. D. Flaherty, Engr., Livingston, Mont., for an electric lighting and water-works system.

MARYVILLE, MO.—Plans are being made to enlarge the power plant of the Maryville Electric Light & Power Co., Charles Wirtz, Ch. Elecn., for increased demands upon it. A new 200-HP. engine has been purchased and will soon be installed and the old boilers will be replaced with ones of greater steam capacity.

SPRINGFIELD, MO.—Plans are being made by the Springfield Gas & Electric Co. to extend its service to surrounding districts. The company will erect power houses and gas producer plants in a number of cities where franchises have been secured, which probably will ultimately be converted into substations supplied from a large central generating power plant. H. J. Fox is Supt.

COLUMBIA, MO.—Plans are being considered for extensions to the municipal electric light plant and water-works system. When plans are prepared an election will be held to vote on the proposition to issue bonds to pay for improvements. John S. Bicknell is City Clk.

GREENVILLE, TEX.—We are officially advised that the WEBER-DULLE CO., of Houston, Tex., David M. Dullen, E., Gen. Mgr., has been awarded contract for the foundations and installing machinery for the light and power plant for the city. The machinery will be furnished by the CHALMERS CO., Milwaukee, Wis. ALLIS-

DENVER, COLO.—The Denver Tramway Co. will install an additional 1,000 HP. unit in its plant at 14th and 15th Sts. and Platte River. An addition will also be made to the power house, making it large enough to accommodate several more units as needed. John Evans is Ch. Engr.

PUEBLO, COLO.—Plans are being prepared by the Pueblo & San Luis Valley Ry. Co. for the construction of an electric power plant to furnish electricity for operating its railway and to drive centrifugal pumps for both irrigation and drainage purposes. The company is considering the installation of gas engines to drive the plant.

BAKER, WASH.—The Baker River Power & Light Co. has filed notice of appropriation of water rights of the Baker River of 2,000 cu. ft. per second. The company plans to erect a power station in or around Concrete to supply electricity to the villages along Baker River.

LEAVENWORTH, WASH.—Plans are being prepared by the Great Northern Ry. Co. for the construction of a large electric power plant in the Lake Chelan country, to develop about 80,000 HP. in connection with equipping the western division of the railroad to be operated by electricity. The proposed plant is to be supplemented by the present Leavenworth station, which has an output of 12,000 HP., utilized for hauling trains through the Cascade Mountain tunnel. R. L. Beaulieu is Resident Engr., Seattle.

SEATTLE, WASH.—Contracts have been awarded by the Board of Public Works as follows: 18th Ave. and other streets, cluster lighting system: Conduits and generators, to C. F. McDONALD, at $15,029; poles and glassware, to OLYMPIC FOUNDRY CO., Eighth St., South, and Plummer St., Seattle, at $2,902.

EUREKA, CAL.—See item under Manufacturing Plants.

HAYWARDS, CAL.—D. U. Teffelmier, for the United Power Co., has filed a petition with the Board of Trustees for a franchise for the erection and maintenance of transmission lines throughout the city. The company has applied to the Board of Supervisors and to the Trustees of San Leandro for a franchise.

SACRAMENTO, CAL.—Bids will be received by M. J. Desmond, City Clk., until Dec. 13 for lighting streets and departments of the city for one year from Dec. 31.

LOS ANGELES, CAL.—The U. S. Reclamation Service, Los Angeles, has opened bids for six transformers for use in substations on the Salt River project in Arizona. Contract has been awarded to the WAGNER ELECTRIC MFG. CO., Frisco Bldg., St. Louis, Mo.

TEHACHAPI, CAL.—S. A. Barrett, of Los Angeles, Cal., is planning to establish an electric lighting system at Tehachapi. It is proposed to secure power from the Kern River Power Co. If this plan does not go through a power plant will be built.

GOLDFIELD, NEV.—The New Bonnie Clare Mining Co. has awarded contract to the NEVADA-CALIFORNIA POWER CO. for electricity to operate its mill at Bonnie Clare. Transmission line will be extended at once.

GRANGEVILLE, IDAHO.—J. F. Corner, 442 Payton Block, Spokane, Wash., is secretary and R. J. Zell, 1718 Post St., Spokane, is engineer for the proposed power plant to be constructed on Snake and Salmon Rivers. Estimated cost, about $2,750,000. Noted on Nov. 11.

WOODSTOCK, ONT.—The Water and Light Commissioners have awarded the CANADIAN GENERAL ELECTRIC CO., Toronto, at $25,000, contract for supplying the necessary electrical equipment in order that the city may make use of Niagara power under its contract with the Hydro Electric Power Commission. The equipment will include a 5-panel switchboard, with instruments and regulators, three 300-KW. transformers; two 1,500-gallon per minute turbine pumps, each driven by a 175-HP. induction motor, and one 500-HP. motor to drive the present generator.

LONDON, ONT.—The contract of the London Electric Light Co. for lighting the streets expires on Nov. 30. The company has offered to renew the contract for another year, pending the completion of the city's distributing plant, to light the streets with Niagara power at 23 cts. per lamp per night. If a contract for a shorter period is desired the company will submit a sliding scale of rates. There are now 342 street lamps in use, and the hydro-electric power is promised and expected next ready for delivery in London early in the spring. A special meeting of the Council will be held to consider the question. The amount paid to the London Electric Co. for street lighting for last year was $28,146. A. O. Hunt is Supt. and Ch. Elecn.

LACOMBE, ALTA.—The Council has awarded contracts for an auxiliary steam plant for the power house and for the repairs to the dam. Cost, about $4,000. The

WATEROUS ENGINE WORKS CO., of Brantford, Ont., has the contract for steam plant.

HIDALGO, MEX.—The Toltec Portland Cement Co., Kansas City, Mo., has awarded contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for induction motors and equipment for its plant at Hidalgo, as follows: Five 150-HP. motors of special design for driving tube mills; two 150-HP. motors to be belted to line shafts; two 110-HP. motors for pulverizers; three smaller belted motors, and one complete 20-HP. single-drum hoist.

BRIDGES.

(* *denotes that this work is advertised in Engineering News.*)

NASHUA, N. H.—The Council has passed a resolution providing for the construction of the Hudson bridge.

ATHOL, MASS.—The CANTON BRIDGE CO., Canton, Ohio, has been awarded contract at $8,000, for constructing a 108-ft. arch bridge over Exchange St., having three spans, 36 ft. long, two piers, 5-ft. at base, 3-ft. at top, abutments, 5-ft. at base, 4-ft. at top; concrete flooring; roadway, 38-ft. wide, 12-ft. walks. Winfield W. Woodward is Engr., Athol. Bids were opened on Nov. 20. Noted on Nov. 18.

ROCHESTER, N Y.—A new bridge may be built here across the River at Central Ave. Estimated cost, $150,000. Edwin H. Fisher is City Engr.

MEADVILLE, PA.—The County and Meadville Traction Co., J. S. E. Key, Ch. Engr., have decided, it is reported, to construct a steel single-span bridge over French Creek at Mead Ave. Estimated cost, about $30,000.

WASHINGTON, D. C.—MARTIN McNAMARA, 608 A St., S. E., Washington, has secured contract to construct an iron bridge, 2-span, 200 ft. long and 45-ft. wide, over the causeway on line of Hume Ave.

BUCKINGHAM, VA.—Bids will be received until Dec. 11 by P. St. J. Wilson, State Highway Comr., Richmond, for constructing a steel bridge over Slate River, in Buckingham County.

DANVILLE, VA.—The city is considering an issuance of $100,000 of bonds for the construction of a bridge and improving West Main and Worsham Sts.

BENWOOD, W. VA.—The Bellaire, Benwood & Wheeling Bridge Co. has been incorporated. The company will build a bridge across the Ohio River from Benwood to Bellaire, Ohio. Estimated cost, $700,000.

ANDERSON, S. C.—The Charleston & Western Carolina Ry. Co., of Augusta, Ga., has awarded to the PHOENIX BRIDGE CO., Philadelphia, Pa., contract for construction of two bridges on what is known as the Anderson Branch, one crossing Rocky River and the other Little River. The steel work is to consist of one span each. Total cost, about $20,000.

COLUMBIA, S. C.—The Seaboard Air Line Ry. will spend about $500,000 on the construction of the proposed Lincoln St. viaduct, which will extend 4,900 ft. from Senate St. to a point about 50 ft. outside of city limits, where work will be continued with fill about 2,500 ft. long, clearance, 100 ft. The superstructure will be of steel, requiring 5,260 tons. Cost, about $350,000. The foundations will be of concrete, requiring 50 cars of cement and 5,500 yds. of concrete. Cost, about $40,000. Estimated cost of earth filling, $75,000. ALSOP & PIERCE, Newport News, Va., have contract for foundations, and will soon begin work. PENNSYLVANIA STEEL CO., Girard Trust Bldg., Philadelphia, Pa., has contract for superstructure. J. B. McClain, Washington, Pa., is Resident Superv. Engr. Noted on Nov. 25.

WEST END, ALA. (Montgomery post-office), ALA.—The city has voted $6,500 of bonds for the construction of concrete bridges and culverts.

NEW ORLEANS, LA.—The Penn Bridge Co., Beaver Falls, Pa., has submitted the lowest bid to the city for the erection of a bridge over the New Basin Canal at Galvez St. at $14,980.

CLEVELAND, OHIO.—The Board of Public Service has let contract to the WILLIAM KUPPER CONSTRUCTION CO., American Trust Bldg., Cleveland, at $38,545, for grade crossing and raising bridge, at West 25th St. and Walworth Run. Robert Hoffman is City Engr. F. D. Richards is Designing Engr.

DAYTON, OHIO.—The City Council has passed a resolution instructing the City Engineer to prepare plans and estimates for a concrete or steel bridge over the Mad River at Keowee St.

*CINCINNATI, OHIO.—We are officially advised that bids were received as follows on Dec. 6 by the Board and Director of Public Works for superstructure and substructure work of lift bridge at Mohawk Pl. over the Miami and Erie Canal in connection with the remodeling of the adjoining streets and sidewalks: F. J. Brackett, First National Bank Bldg., Cincinnati, $41,-000; Graniger & Co., $34,300; York Bridge Co., York, Pa., $42,000; The Capitol Construction Co., Ruggery Bldg., Columbus, Ohio, $41,500. John T. Wenner is Clk.

CLINTON, ILL.—WILLIAM H. SHONS, Freeport, Ill., has been awarded contract for constructing a large bridge here.

WYOMING, ILL.—WILLIAM DRINNIN of the Clinton Bridge & Iron Works, Clinton, Iowa, has been awarded contract for the construction of a bridge in Hallock Township, Peoria County, across Senachwine Creek, at $3,795, and for constructing a 135-ft. span in Millbrook Township, across Spoon River, north and west of Laura.

BLOOMINGTON, ILL.—Contract for the Rutledge bridge has been let to the FREEPORT BRIDGE CO., Freeport, Ill.; KEENAN & CO., of Leroy will build the abutments. Cost, $4,600.

DENISON, IOWA.—The Board of Supervisors of Crawford County on Nov. 10 awarded contract for constructing steel and wooden bridges throughout the county during 1910 to W. M. LANNA, of Harlan, Iowa.

HEBRON, NEB.—Bids will be received by J. C. Strain, Clk. Bd. of Comrs. of Thayer County, until noon, Dec. 28, for the construction of a bridge.

YORK, NEB.—Bids will be received by W. A. Miller, Clk. York County, until noon, Jan. 11, for the construction of steel and wooden bridges that may be built in the county for the year 1910.

ABERDEEN, S. DAK.—The Board of County Commissioners has awarded the following contracts: A. Y. BAYNE & CO., 202 Commercial Bldg., Minneapolis, Minn., at $5,863, for constructing two bridges and cement wings in Brown County; CENTRAL STATES BRIDGE CO., 601 Beecher St., Indianapolis, Ind., at $6,936, for the construction of two steel bridges and cement wings in Brown County. Bids were opened on Nov. 16.

SIBLEY, MO.—Bids will be received by the Board of Commissioners of Jackson County, Kansas City, until Dec. 14 for two 24-ft. steel spans, with stone abutments, three miles west of Sibley. R. T. Proctor is County Engr., Kansas City.

KANSAS CITY, MO.—The Board of Park Commissioners, W. H. Dunn, Engr. and Supt., is having plans prepared by Ira Hedrick, Consulting Engr., Keith & Perry Bldg., for reinforced concrete bridges, Venetian styles, in Swope Park. F. P. Gossett is Secy.

The Missouri, Oklahoma & Gulf R. R. Co. has awarded contracts for constructing a 5-span steel bridge over Red River, Texas, as follows: Superstructure, KAHNMAN & McMURRAY, Sharp Bldg., Kansas City; substructure, WISCONSIN BRIDGE & IRON CO., 1127 Monadnock Bldg., Chicago. Ira Hedrick is Engr., Keith & Perry Bldg.

FORT WORTH, TEX.—The Fort Worth Stockyards Co. will construct a bridge across Marine Creek, to be of reinforced concrete and brick, two arches of 45 ft. each, half circle bottom of concrete.

NEW BRAUNSFELS, TEX.—The Comal County Commissioners will construct a low concrete bridge across the Guadalupe River at Guene's Crossing.

BEEVILLE, TEX.—Bee County will construct a steel bridge over Aransas Creek, for which bids are asked. Dan Troy is County Clk.

DALLAS, TEX.—Eight bids were submitted to the Board of Municipal Commissioners on Nov. 26, for erecting the concrete bridge over Turtle Creek on Cedar Springs St. The bridge is to be 125 to 150 ft. long, 50 ft. wide and at least 17 ft. in the clear for the creek. The bids were: For the construction of the concrete bridge, steel reinforced, with necessary fill, excavation, stone and materials, with railing of iron: D. T. Johnson, Kansas City, Mo., $8,986; R. O. Miracle, 3035 Irving Ave. South, Minneapolis, Minn., $13,645; William T. Wesch, Dallas, $8,900; Weber-Duller Co., Houston, $14,000; Austin Bros., Dallas, $9,611; Ball Engineering Co., Dallas and St. Louis, Mo., $17,500; F. H. Lancashire, Dallas, $10,959; Topeka Bridge Co., Topeka, Kan., $9,750.

ATOKA OKLA.—The Pittsburg County Commissioners have let contract for a large bridge at Breeden, over Gaines Creek. Contract was awarded to the KANSAS CITY BRIDGE CO., 1108 E 15th St., Kansas City, Mo.

TACOMA, WASH.—Bids will be received by H. J. McGregor, Comr. Pub. Wks., until 11 a. m., Dec. 15, for the construction of a viaduct over the gulch, between Fife and Oakes Sts., on line of N. 23d St.

SPOKANE, WASH.—Contract for constructing a double-track steel and concrete bridge over the Spokane River for the Spokane & Inland R. R. Co. has been awarded, it is reported, to GRANT SMITH & CO., Fernwell Bldg., Spokane.

The UNION FUEL & ICE CO., of Spokane has secured contract for furnishing 30,000 bbls. of cement, to be used in the construction of the Monroe St. bridge, at $2.59 per bbl.

SACRAMENTO, CAL.—The Boards of Supervisors of Yolo and Sacramento Counties have adopted plans for the steel bridge to be erected over the Sacramento River. The structure is to be constructed jointly by the Southern Pacific Ry. Co. and Yolo and Sacramento Counties. Estimated cost, $160,000.

LOS ANGELES, CAL.—On Nov. 24 the Board of Supervisors awarded contract for construction of four pile trestle bridges across Tejunga Wash in San Fernando road district to the MERCEREAU BRIDGE & CONSTRUCTION CO., P. E. Bldg., Los Angeles, at $12,700.

SASKATOON, SASK.—The citizens on Nov. 18 voted to issue $18,000 of bonds for the erection of a footbridge at 20th St. Bids for construction will be received about Jan. 1. J. H. Trusdale is City Clk. George T. Clark is City Engr.

BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

*MANCHESTER, N. H.—Bids are asked by James Knonx Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Jan. 13, for the construction (complete) of the extension to the U. S. post-office and court-house at Manchester, N. H.

SPRINGFIELD, MASS.—Bids are asked by the Municipal Building Commission in the Common Council Room, Municipal Building, Pynchon St., Springfield, until 3 p. m., Dec. 22, for Contract No. 2, being the excavation, mason work, cutstone, structural steel, fireproofing, roofing, ornamental iron, plastering, mosaic and tile floors, interior stone and marble, carpentry and finishing, vaults and elevators for the auditorium, tower and passage, municipal office building and terrace and steps of the municipal buildings to be erected by the city of Springfield in Court St., facing Court Sq. Drawings and specifications may be seen at the Municipal Building, Springfield, or at the offices of Pell & Corbett, Archs., 122 East 25th St., New York. George D. Pratt is Chn. Bldg. Com.

We are officially advised that a 2-story fireproof garage building will be erected by William J. Hyland, at 34 Sanford St., where the office of the Annable Lumber Co. formerly stood. The building will be of brick and concrete and will be built heavy enough to permit putting on four stories more later. The building will be leased to the Morse-Readio So. There will be an entrance from East Court St., from which there is a 20-ft right-of-way to the property on which the new garage will stand. The structure will be 80 ft. on Sanford St., and 90 ft. deep. It will accommodate 35 cars and will leave space enough through the middle for two cars to stand abreast. The second floor of the building will be occupied as a machine and repair shop. Bids will be received about Dec. 1. George R. Pyne, 31 Elm St., Springfield, Mass., is Arch. The following contracts have been let: Masonry, MICHAEL MALONEY, 78 Taylor St., Springfield; fireproofing, EASTERN CONCRETE CO., Boston; elevators, BAY STATE ELEVATOR CO.; iron, PROVIDENCE STEEL CO.

GILBERTVILLE, MASS.—E. C. & G. C. Gardner, Archs., 33 Lyman St., Springfield, have been selected to prepare plans for the new high school to be erected in Gilbertville. It will be a 2-story brick building with eight class rooms, steam heat and all improvements.

NEW YORK, N. Y.—Bids are asked by J. W. Stevenson, Comr. of Bridges, until 2 p. m., Dec. 20, for the completion of the substructure, the erection of the superstructure and the installation of plant, exclusive of interior finish, of the Municipal Building, at the Manhattan terminal of Brooklyn Bridge. Fully noted last week.

William C. Frohne, 38 East 21st St., Arch. for Philip Braender, has filed plans for the 20-story commercial building to be erected on the site of the Ashland House, at Fourth Ave. and 24th St. It will front 98.9 ft. on the avenue and 150 ft. on the street, and will cost $960,000.

Plans have been filed for an 8-story apartment house, with suites for 33 families, to be erected on 113th St., east of Broadway, by the Paterno & Sons Construction Co., at a cost of $150,000, and for two 6-story apartment houses, each with 31 suites, to be built on 157th St., east of Broadway, for the Highwood Realty Co., Julius Weinstein, Pres., 1990 Seventh Ave., at a cost of $330,000.

Robertson & Gammie, 1375 Intervale Ave., will erect from plans by J. C. Cocker, 2017 Fifth Ave., Arch., a 5-story flat, at the northwest corner of Amsterdam Ave. and 174th St., to cost $50,000.

Plans for a 12-story store and loft building are being prepared by Schwartz & Gross, Archs., 347 Fifth Ave., for the plot, 114.2 × 92 ft., at 40 to 46 West 20th St., adjoining the Cammeyer Building, at the southeast corner of Sixth Ave. The structure, which will represent an investment of about $700,000, when completed, is to be put up by the Fabian Construction Co., M. Crystal, Pres.

NEW YORK, N. Y.—We are officially advised that the contract for furnishing and erecting the structural steel for a 12-story loft building, at 317-323 East 34th St., has been awarded to the BALTIMORE BRIDGE CO., 68 Broad St., New York. George & Edward Blum, 505 Fifth Ave., are Archs.; Charles O. Brown is Engr., 624 Madison Ave.

Emory Roth, Arch., 20 East 42d St., has prepared plans for a 6-story apartment, 99.11 × 140 ft., for Morris Levine, 320 Fifth Ave., to be erected at the southwest corner of Broadway and 153d St., at a cost of $190,000.

Plans for an 8-story warehouse have been filed by William Schnaufer, Arch., 363 East 149th St. The building will cost $80,000 and will be erected by the Manderkin Building Co., George Kinderman, Pres., on Webster Ave., north of Anna Pl.

Plans have been filed for two 2-story office buildings, with stores on the ground floor, each 99.11 ft. front and 75 ft. deep, to be built for Gross & Herbener, Inc., on the Broadway block from 157th to 158th St., from designs by Neville & Bagge, Archs., 217 West 125th St., at a cost of $50,000.

NEW YORK, N. Y.—Bids are asked by Nicholas J. Hayes, Fire Comr., until 10.30 p. m., Dec. 17, for furnishing all the labor and materials required for the erection and completion of a new building for an engine and hook and ladder company, to be located on the east side of East 14th, 293.01 north of Kings Highway, Boro. of Brooklyn.

We are officially advised that the contract for the structural steel for a 12-story apartment building for the Emsworth Construction Co., at the northeast corner of Riverside Drive and 113th St., has been awarded to the BALTIMORE BRIDGE CO., 68 Broad St., New York. Neville & Bagge, 217 West 125th St., are Archs.

Plans have been filed for an 8-story loft building, to cost $90,000, on 176 Park Row, for Bernard Golden, 508 Pearl St., who has many realty holdings in the neighborhood devoted to business.

An appropriation was made by the Board of Estimate on Dec. 3 for $2,237,000 for the Charities Department. The money is to be used in improving the hospital facilities on Randall's and Blackwell's islands and for improvements in connection with the Kings County and Cumberland St. hospitals. An appropriation of $150,000 was passed to provide for a new building for the Children's Court. The report of the Chief Engineer shows that the value of improvements for which final authorization has been given since Jan. 1, 1909, is $4,301,100.

NEW YORK, N. Y.—We are officially advised that Arbuckle Bros., foot of Jay St., Brooklyn, will erect an 11-story warehouse, 200 × 206 ft., to cost $650,000, on a block bounded by Jay, John, Jewel and Plymouth Sts., Brooklyn. The contract for steel in the basement and first floor has been let to POST & McCORD, 44 East 23d St., New York. The contract for the superstructure will be let in the spring. William Higginson, Park Row Bldg., New York, is Arch.; F. E. Pratt is Engr. for Arbuckle Bros. Noted last week.

The Riverside Viaduct Realty Co., Riverside Drive and 127th St., Joseph Newmark, Pres., is taking bids on the structural steel for an 8-story elevator apartment house, 83 × 100 ft., to be erected in the south side of 111th St., 75 ft. east of Broadway, at an approximate cost of $300,000. The plans are still in progress by Mulliken & Moeller, 103 Park Ave.

Bids are asked by the Park Board, until 3 p. m., Dec. 16, for furnishing and delivering 400 corrugated galvanized iron panels for the American Museum of Natural History, Boro. of Manhattan. Henry Smith is Pres.

A contract has been let to the BALTIMORE BRIDGE CO., 68 Broad St., New York, for furnishing and erecting the structural steel work of a 6-story hotel building, at 45 East 41st St., for the Athens Hotel Co. N. C. Mellen is Arch., 45 West 34th St., and the E. E. PAUL CO., 289 Fourth Ave., are the general contractors.

NEW YORK, N. Y.—Contract has been awarded by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for the general construction, etc., of new Public School No. 77, on the southerly side of Covert Ave., between Centre and George Sts., Ridgewood Park, Boro. of Queens, to the BOTTSFORD-DICKINSON CO., 1170 Broadway, New York, at $282,642. Bids were received on Nov. 29.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 3 p. m., Dec. 20, for fireproof stairways, etc., at Public Schools Nos. 7, 46, 58 and 78, Boro. of Brooklyn; for the general construction, etc., items 1 and 2 of addition to and alterations in Erasmus Hall High School, on the easterly side of Flatbush Ave., about 205 ft. north of Grant St., Boro. of Brooklyn; for completing and finishing the alterations, repairs, etc., at Public School No. 17, Driggs Ave. and North Fifth St., Boro. of Brooklyn, in accordance with the original plans and specifications of contract awarded to Charles Cochar, which has been declared abandoned; for furnishing and erecting three portable school houses on the premises of Public School No. 8, Mosholu Parkway, Briggs and Bainbridge Aves., Boro. of the Bronx; for furnishing and erecting three portable school houses on the premises of Public School No. 15, Westchester and St. Lawrence Ave., Boro. of the Bronx; for the general construction, etc., of new Public School No. 44 on the southwest corner of Prospect Ave. and 176th St., Boro. of the Bronx; for repairs, alterations and additions to the electric equipment in Public School No. 11, at 314 West 17th St., Boro. of Manhattan; for alterations to electric equipment in hall of the Board of Education, southwest corner of Park Ave. and 59th St., Boro. of Manhattan; for alterations, repairs, etc., at Parental School of the westerly side of the road between Flushing and Jamaica, about 1,700 ft. south of Hempstead Turnpike, Flushing, Boro. of Queens.

NEW YORK, N. Y.—Bids were received as follows by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, on Dec. 6, for the general construction, etc., of additions to and alterations in Public Schools No. 78, on the northeast corner of Pleasant Ave. and East 119th St., Boro. of Manhattan: John F. Walsh, 136 Charlton St., New York, $183,447; Richard E. Henningham, 1 Madison Ave., New York, $182,752; P. J. Brennan & Son, 624 Madison Ave., New York, $189,500; John Kennedy & Co., 1133 Broadway, New York, $190,000; Thomas McKeown, 103 Park Ave., New York, $178,333; James McArthur, $217,000; C. H. Peckworth, 115 Hudson St., New York, $191,870; Calumet Construction Co., 15 East 59th St., $198,743; O'Connell & Hanna, 245 West 125th St., New York, $184,000; George F. Driscoll, 548 Union St., Brooklyn, $205,998; Patrick Sullivan, 230 Grand St., $192,400; James F. Kerr, 205 West 50th St., New York, $165,433; J. & L. Moreland 1910 Park Ave., New York, $182,800; H. C. Stowe, 221 Greenpoint Ave., Brooklyn, $173,700; George Hilderbrand, 38 Park Row, New York, $189,-744.

Bids were received at the same time for the general construction, etc., of new Public School No. 92, on the northerly side of Park Ave., between Grinnell and Randall Sts., Corona, Boro. of Queens: J. F. Walsh, $292,-000; T. A. Clark, 231 Greenpoint Ave., Brooklyn, $281,000; R. E. Henningham, 1 Madison Ave., New York, $295,000; Jas. McArthur, $312,000; C. H. Penkworth, 115 Hudson St., New York, $305,581; Thos. McKeown, 103 Park Ave., New York, $303,000; P. Gallagher, $322,900; John Kennedy Co., 1133 Broadway, New York, $309,273; Peter Cleary, $283,363; Geo. F. Driscoll, $294,700; J. F. Brennan, $286,000.

BUFFALO, N. Y.—J. C. Dold, Pres. of the Jacob Dold Packing Co., 703 William St., will erect a stone and brick residence at Nottingham Terrace and North Lincoln Boulevard, Nye Park. Estimated cost, $50,000. The architect is not yet selected.

The Faxon, Williams & Faxon Co., William H. Faxon, Pres., 589 Main St., will build a 5-story and basement business building and make alterations to the present building on Washington St., near Clinton st. Cost, $40,-000. Green & Wicks, 110 Franklin St., Buffalo, are Archs.

The Erie County Board of Supervisors has voted to build a fireproof hospital building to cost $500,000, and the Almshouse Committee, E. P. Ouchie, Chn., 605 Brisbane Bldg., Buffalo, will determine the method of procedure in regard to plans, etc.

Esenwein & Johnson, Archs., 777 Ellicott Sq. Bldg., are preparing plans for a theater to be erected at Genesee and Pearl Sts. by the Shea Amusement Co., Michael Shea, Pres. It will be of fireproof construction, steel, brick and concrete. Estimated cost, $80,000.

UTICA, N. Y.—The John A. Roberts Co., 169 Genesee St., are having preliminary plans prepared for a department store building, 125 x 150 ft., to have five stories and basement and brick and steel construction, with terra cotta front. Estimated cost, $300,000. Construction work to be started May 1.

Esenwein & Johnson, 777 Ellicott Sq. Bldg., Buffalo, are preparing plans and will receive bids early in 1910 for a 9-story and basement hotel, 100 x 150 ft., to be erected at Lafayette and Seneca Sts., at estimated cost of $500,000, by a company organized by Frederick W. Rockwell, of the Ten Eyck Hotel, Albany, and Frank A. Dudley, 45 Falls St., Niagara Falls, N. Y. It is stated Johnson Bros., Mgrs. of Baggs Hotel, Utica, will be the lessees. The building will have 216 rooms and will be of steel, stone and terra cotta fireproof construction.

YONKERS, N. Y.—We are officially advised that Squires & Wynkoop, Archs., 44 Cortlandt St., New York, are preparing plans for two 6-story elevator apartment houses to be erected on South Broadway. The estimated cost of each is about $150,000. The apartments are of 4, 5, 6 and 7 roooms. Fronts are of limestone, brick and terra cotta. It is planned to design the house so that the front will be lower than the rear, the entrance court being one story above the street. Contracts will be let in about two months.

AUBURN, N. Y.—C. J. DEFENDORF & CO., 94 East Genesee St., Auburn, have secured the general contract to erect a brick school for the Board of Education, at Auburn, to cost $75,000. S. E. Hilliger, Seward Bldg., Auburn, is Arch. Seating capacity, 450.

SYRACUSE, N. Y.—The Holy Trinity Congregation, Rev. John Renland, Pastor, will erect a stone, molded brick, terra cotta and structural steel church, 52 x 150 ft., on Park St., to cost $50,000. Plans are being prepared by Charles W. W. Eldridge, Arch., 424-426 Granite Bldg., Rochester, who will receive bids about March 1.

NEWARK, N. J.—We are officially advised that F. T. NESBIT & CO., 116 Nassau St., New York, N. Y., have the general contract to construct a 10-story fireproof store loft and office building which the Wiss Realty Co., 683 Broad St., is to erect at 671-675 Broad St., Newark, to cost about $250,000. The construction will be of brick, marble, terra cotta and steel and the plans call for a structure measuring 60 x 100 ft. H. Baechlin, 45 Clinton St., Newark, is Arch. Work of demolishing the building at present on the site has been started.

NEW BRUNSWICK, N. J.—Bids were received as follows on Dec. 2 by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office extension at New Brunswick, N. J.: Bliss & Griffiths, New York, $41,471; William H. Fissell & Co., New York, $30,900; Luyster & Lewes, Dayton, Ohio, $35,500; Wills & Marvin Co., New York, $28,702; Westchester Engineering Co., 39 East 42d St., New York, $32,970; Conroy Bros., Inc., 217 West 125th St., New York, $32,937; John G. Unkefer & Co., Minerva, Ohio, $39,160; Hynd Bros., New York, $35,620; A. Raymond Roff, Philadelphia, $44,500; M. P. Wells, Philadelphia, $37,000; Engineering Construction Co., Baltimore, $33,327.

PHILADELPHIA, PA.—Bids are asked by W. Hunter, Ch. Engr. Philadelphia & Reading Ry. Co., Reading Terminal, Philadelphia, until noon, Dec. 14, for the following construction work: Contract No. 16, passenger station at Tioga; Contract No. 17, passenger station at Nicetown; Contract No. 39, storehouse and engine house changes, Green St. yard; Contract No. 41, engine water supply, Green St. yard.

A vaudeville and moving picture theater will be erected by the Lehigh Palace Amusement Co. on the north side of Lehigh Ave., east of Germantown Ave. The plans, which are being prepared, will provide for a structure 126 ft. in width and 100 ft. in depth. The moving picture theater that is now located there will be included in the site of the new theater, which will cost close to $100,000. The front will be of ornamental plaster and marble and the auditorium will provide seats for 1,800 patrons. The theater will be provided with a completely equipped stage, with a width of 50 ft. in the proscenium arch.

Milligan & Weber, Archs., 520 Walnut St., are planning a 4-story apartment house, to be built on Chestnut St., west of 37th St. The cost will be $100,000.

The Manufacturers' Club has purchased the Bellevue Hotel and will raze the present building and erect a new structure. The proposed building will be seven stories high and will have a frontage on Broad St. of 100 ft. N. T. Folwell is Pres.; A. E. Buck, Chn. Finance Com. of the Manufacturers' Club.

PHILADELPHIA, PA.—We are officially advised that plans for the erection of the branch Carnegie Free Library in Oak Lane are being prepared by Ralph E. White, Arch., Pennsylvania Bldg. The building which will be erected at Twelfth St. and Oak Lane, will be of brick, terra cotta and limestone, one story high, and will measure 81 x 91 ft. The cost will be about $50,000. Bids will be received in February.

CHESTER, PA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Jan. 11, for the extension, remodeling, etc. (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Chester.

BALTIMORE, MD.—Bids are asked by the Board of Awards, until 11 a. m., Dec. 15, for School No. 2, to be erected at Stiles and Little Gough Sts., Baltimore. Edward D. Preston is Inspector of Bldgs.

EPHRAIM MACHT, Equitable Bldg., has contracted to build for the Sterling Realty Co., 29 2-story brick dwellings in the western section of the city, to cost about $50,000. Eleven of the houses are to be on the north side of Saratoga St. and eleven on the south side of Mulberry St., both between Brice and Pulaski Sts. The other seven houses will be erected on the east side of Pulaski St., between Mulberry and Saratoga Sts. Plans for the houses were made by Jacob F. Gerwig, Arch., 11 East Lexington St. The fronts will be of Pompeiian brick. Each house will have a bay window. The dimensions will be 14 x 46 ft. Furnaces will be installed.

WASHINGTON, D. C.—Bids are asked until noon, Dec. 15, by Elliott Woods, Supt. U. S. Capitol Bldg. and Grounds, Washington, to furnish and set all interior marble work required for the addition to the U. S. courthouse.

NORFOLK, VA.—A permit has been issued by the Building Inspector to EAST & HOBBS, contractors, for the erection of the proposed High School and the stipulated cost of construction is $250,000. The building operations will commence at once, and it is expected that the structure will be ready for occupancy Sept. 15, 1910.

*FORT MONROE, VA.—Bids are asked until 10 a. m., Jan. 10, by Capt. Ernest R. Tilton, Q. M., for the construction, including plumbing, heating, electric wiring and fixtures, of an engineer's storehouse at Fort Monroe, Va.

FORT McPHERSON (Atlanta post-office), GA.—We are officially advised that the contract for constructing Quartermaster's stables at this post has been let to ROUNDS & TRIPP, of Atlanta, Ga.

NEW ORLEANS, LA.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the mechanical equipment of the post-office building at New Orleans, La., to CHARLES E. MONDAY & CO., 1318 Olive St., Philadelphia, at $168,557, including Heine boilers. This award does not include generators, which were part of the original proposal, but the Government reserves the right to contract for generators at any time during the ensuing year at the contractor's bid of $27,720.

STEUBENVILLE, OHIO.—Esenwein & Johnson, 777 Ellicott Sq., Buffalo, N. Y., are preparing plans for a 7-story addition to the Imperial Hotel, 50 x 70 ft., of brick and steel construction. W. H. Lowe, owner and proprietor, will receive bids early the coming year.

AKRON, OHIO.—The Akron Hotel Co., M. O'Neil, Pres., will receive bids about Feb. 1 for steel and masonry for the Portage Hotel, 80 x 180 ft., seven stories and basement, to be erected at the corner of Maine and West Market Sts., at an estimated cost of $300,000. Excavation is in progress by JOHN GILL & SON, Citizens Bldg., Cleveland, Ohio, who have general contract. Esenwein & Johnson, 777 Ellicott Sq. Bldg., Buffalo, N. Y., are Archs.

COLUMBUS, OHIO.—The Ohio Electric Ry. Co. has had plans completed for the proposed freight and passenger stations which are to be constructed at Columbus. The plans call for four buildings to be located in the plot of land bounded by Town, Rich and Third Sts. The main passenger station, to be located at the corner of Rich and Third Sts., will be two stories high, with a ground area 150 x 87 ft. The foundations will be of such strength that the building may be increased to eight stories in height. The freight depot, north of the passenger station, will be 200 x 45 ft., with a drive 32 ft. wide on the east side. On the opposite side of the tracks an express building, 200 x 25 ft., will be erected, and south of it an extra freight depot, 187 x 32 ft. Dana Stevens is Gen. Mgr., Cincinnati, Ohio.

CLEVELAND, OHIO.—Upon the completion of grade elimination work now being done by the New York, Chicago & St. Louis Ry. Co. at Euclid Ave., in Lake View, that company will erect there a station. The station will be of brick with stone trimmings. A. W. Johnson is Gen. Mgr.

INDIANAPOLIS, IND.—D. A. Bohlen & Son, Archs., Majestic Bldg., Indianapolis, will receive bids after Jan. 1, for the construction of the proposed Vincent's Hospital building north of Fall Creek. Plans will be completed in a few days.

TERRE HAUTE, IND.—W. P. Ijams and Crawford Fairbanks are asking for bids for the erection of a hotel on the site of the old Grand Opera House. Work to begin after Jan. 15.

PEORIA, ILL.—Esenwein & Johnson, 777 Ellicott Sq. Bldg., Buffalo, N. Y., have completed plans for a 10-story hotel, 65 x 150 ft., to be erected at Jefferson and Liberty Sts., by the Peoria Hotel Co., organized by Wiley L. Brackett, of Peoria, and Frank A. Dudley, of Niagara Falls, N. Y. Estimated cost, $500,000.

CHICAGO, ILL.—We are officially advised that Maurice L. Rothschild will erect an annex at State St. and Jackson Boulevard. The annex will occupy a lot 46¾ x 100 ft. Like the corner building, it will have eight stories and attic and will be patterned to conform to the present building in every detail. Holabird & Roche, Archs., Monadnock Bldg., have prepared the plans. The corner lot has a frontage of 38 ft. and is under lease for 99 years. The property fronts 20 ft. and has a depth of 100 ft. The general contract has been let to E. L. SCHEIDENHELM, 135 Adams St., Chicago.

The Chicago "Record-Herald" states that two buildings, a hotel and an exhibition building, are to be erected in the vicinity of Chicago Ave. and Lake Shore Drive at a cost of $6,000,000. The hotel will be twelve stories high. Holabird & Roche are Archs., Monadnock Block, Chicago.

MARSHFIELD, WIS.—The Wood County Board of Supervisors, Grand Rapids, Wis., has decided to appropriate $130,000 for the construction of a county insane asylum and almshouse at Marshfield, Wis.

WAUKESHA, WIS.—Bids are asked by the State Board of Control, Allan D. Conover, Pres., Madison, until Dec. 14, for the construction of a dormitory building at Wisconsin Industrial School for Boys, Waukesha, Wis., and for the erection of a shack, a superintendent's residence and cottages at Wisconsin State Tuberculosis Sanatorium, Wales, Waukesha County, Wis. Plans for dormitory by H. W. Buemming, Arch., Pabst Bldg., Milwaukee; for sanatorium buildings, Howland Russel, Arch., Hathaway Bldg., Milwaukee.

MILWAUKEE, WIS.—Wisconsin Consistory, A. A. Scottish Rite, will build a Scottish Rite Cathedral in Milwaukee. Probable site, Wisconsin and Marshall Sts. Luther L. Caufy is Commander.

The Trustees of Ivanhoe Temple, Tenth St., near Grand Ave., have plans for a 3-story addition, 50 x 60 ft., of solid brick. Decision will be made in about two weeks.

The Milwaukee Board of Public Works will receive competitive sketch plans until Dec. 17 for the construction of a South Side public natatorium at Union St. and Greenfield Ave. The site is 125 x 120 ft. Charles J. Poetsch is City Engr.

The Milwaukee Hospital, State and 23d Sts., is having plans prepared for a building to cost $60,000 for the care of private patients. The building will be 85 x 46 ft., 60 ft. high, with four stories and basement. The fund will be raised by subscription. Rev. Herman Fritschel is Supt.

Plans have been submitted to the Building Inspector for a $150,000 theater by the Juneau Theater Co. The building is to be located at the southwest corner of First Ave. and Mitchell St. It will be of steel and concrete construction, 120 x 125 ft., and four stories high.

WEST ALLIS, WIS.—The State Board of Agriculture has authorized the Milwaukee Electric Railway & Light Co. to construct terminals in State Fair Park, West Allis, near Milwaukee. Cost, $50,000. John I. Beggs is Pres. and Gen. Mgr.

GREEN BAY, WIS.—The Beaumont Hotel Co. awarded contracts for the proposed $60,000 Beaumont Hotel, remodeling the old hotel and adding another story as follows: General contract, KIRKMAN CONSTRUCTION CO., 143 Dearborn St., Chicago, boilers, LYONS BOILER WORKS CO., Depere, Wis.; plumbing, NELSON BROS., Chicago; vacuum heating, MARTIN & WIGMAN, Geeen Bay; electrical work, LANGSTAD & MEYER, Appleton, Wis.

ST. PAUL, MINN.—Bids are asked by Reed & Stem, Archs., Endicott Bldg., for two pressed brick and cut stone residences to be built by Benjamin L. and Wm. L. Goodkind, city, on Oakland and Grand Aves. They will have hot water heating, electric lighting. Cost, $40,000.

Bids will soon be asked by St. Agnes Catholic Church for the construction of the superstructure for its proposed church at Kent and Thomas Sts. George J. Ries, city, is Arch. Cost, $100,000.

FORT RILEY, KAN.—Bids are asked until 10 a. m., Dec. 30, by Capt. W. M. Whitman, Constr. Q. M., for construction of a galvanized iron storage shed.

LINCOLN, NEB.—Bids are asked by the Board of Directors of the Y. M. C. A. until Dec. 20 for a 5-story association building to cost not more than $100,000. F. C. Fiske, Richards Bldg., Lincoln, is Arch.

SPRINGFIELD, MO.—Negotiations which have been conducted by J. T. Woodruff, H. B. McDaniel and H. S. Jewell to finance the building of a 10-story structure at the northwest corner of St. Louis and Jefferson Sts., have been completed. The building is to be a 10-story structure and will be constructed of brick, trimmed in stone or terra-cotta, with steel frame and floors of reinforced concrete. The nine upper floors will each contain 25 rooms, making a total of 225 office rooms in the building. The corridors will be finished in beautiful marble. Electric elevators will be installed. The building will have a 74-ft. frontage on St. Louis St. by 106 ft. on Jefferson St. There will be three store rooms on the ground floor. The contract has been let to GEORGE W. CALDWELL, of Columbus, Ind.

JEFFERSON BARRACKS, MO.—Bids are asked until 11 a. m., Dec. 21, by Capt. Stanley H. Ford, Q. M., for constructing an addition to the Band Barracks at this post.

KANSAS CITY, MO.—The Directors of the Kansas City Terminal Co. have accepted plans for a union station. Building operations will begin at once. Noted on Aug. 5.

HOT SPRINGS, ARK.—No bids were received on Dec. 6, in response to an advertisement issued by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, calling for bids on a post-office at Hot Springs, Ark.

SPOKANE, WASH.—The proposed building for the Royal Arcanum, for which plans are being prepared in the offices of Barnet & Levesque, is to be erected on the east side of McClellan St., between Third and Fourth Aves., to cost $50,000, and to be a 3-story brick structure.

Plans for the 3-story brick and stucco apartment house to be erected by the Equitable Realty Co. at Washington St. and Augusta Ave., and an application for the building permit will be filed with R. C. Sweat, People's Bank Bldg., who is preparing the plans. As soon as permit is issued work will be started. Cost, $110,000.

A building permit for $100,000 has been taken out by R. C. Sweate, Arch., People's Bank Bldg., for a 2-story brick building to be erected on the west side of Howard St., between August and Spofford Aves.

SEATTLE, WASH.—The Chicago, Milwaukee & Puget Sound Ry. Co. has taken out a building permit to erect a warehouse at 1259 Utah St., to cost $50,000. E. J. Pearson is Ch. Engr. of Lines West.

PORTLAND, ORE.—Plans are under way in the offices of Doyle & Patterson, Archs., Worcester Bldg., for a home for the Sisters of the Holy Name, to be erected on their property south of Oswego. Cost, $200,000.

SAN LEANDRO, CAL.—We are officially advised that the Board of Supervisors has appointed a committee consisting of Dr. W. A. Clark, Supt. of the County Infirmary; Dr. O. D. Hamlin, Ch. Surgeon of the Receiving Hospital, and Chief Surgeon Ainsworth, of the Southern Pacific Co., to confer with architects regarding the enlargement and modernization of the County Infirmary. It is planned that the committee of physicians named shall confer with architects and secure tentative plans for proper hospital facilities. It is estimated that the buildings will cost about $500,000. This will provide ample accommodations for an indigent population of from 500 to 600. The present number of indigents at the infirmary is less than 400.

LOS ANGELES, CAL.—A lot at Seventh and Bixel Sts., having a frontage of 140 ft. on Seventh St. and 200 ft. on Bixel St., has been purchased by Joseph Black, San Francisco, from the Title Trust & Insurance Co. The purchaser will erect a hotel or apartment house building to cost $100,000 to $150,000.

A contract to furnish, for about $115,500, a total of 1,650 tons of steel for use in the construction of a building at the northwest corner of Sixth and Spring Sts., for the Los Angeles Trust & Savings Bank, has been awarded to the LLEWELLYN IRON WORKS. Construction will be begun Feb. 1, and will be completed in a year. The cost will be about $500,000. It is planned to make the building eleven stories high, with a frontage of 60 ft. on Spring St. and depth of 165 ft. on Sixth St. There will be about 2,650 offices in the building.

It has been decided to make the Chester office building, to be erected at the northeast corner of Spring and Fifth Sts., ten stories high, and to have it cover the entire property at that location owned by the Chester Fireproof Building Co., which will erect the structure. Construction will be begun July 1. The building will be the same height as the Security Building opposite. The lot on which the building will be located is of irregular shape. The main building will have a frontage of 95 ft. on Spring St. and a depth of 129 ft. on Fifth St. The building will have a wing, 60 x 140 ft., covering the east side of the lot and extending along an alley. The building will contain about 100 offices and will have six passenger elevators. On the Spring St. side there will be a recess court 55 ft. wide and 60 ft. deep. About 2,500 tons of steel to be furnished by the BAKER IRON WORKS, will be used in the construction. The cost of the Chester Building will be about $1,000,000.

LONG BEACH, CAL.—Charles B. Mullaly, 1256 East Ocean Ave., Long Beach, has announced that as soon as necessary details can be arranged, a hotel of steel and reinforced-concrete construction will be erected on Ocean Ave., near Alamitos Ave. The property fronts 230 ft. on the Strand. The owners have secured options on adjoining property, and active work on the construction will begin as soon as these are exercised. The buildings, as planned, will be seven stories high and will contain 500 rooms. Bathing facilities will be provided, and a dancing pavilion will be constructed. The estimated cost of the improvement is $1,500,000.

LONG BEACH, CAL.—The Pacific Electric Railway Co. will erect a reinforced-concrete depot building at Long Beach, Cal., to cost $135,000.

TONOPAH, NEV.—See item under Manufacturing Plants.

TORONTO, ONT.—A. A. Post, 433 Brisbane Bldg., Buffalo, Arch., has completed plans for St. Michael's Hospital, to be erected on Bond St., at an estimated cost of $200,000. The main building will have four stories and basement, 60 x 135 ft., with wing, 55 x 60 ft., of brick and steel fireproof construction. Three electric elevators will be installed. A separate steam plant for the entire institution will be built next summer. Plans are being drawn for the remodeling of the present hospital building and also for two additional buildings to be erected later.

TORONTO, ONT.—Bids are asked until noon, Dec. 14, by J. O. Reaume, Minister of Public Works, for the fireproofing work and materials required in connection with the reconstruction of the Parliament Buildings, including terra-cotta arching, partition work and concrete, etc. E. J. Lennox is Arch., 164 Bay St., Toronto.

WATER-SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

NEW BEDFORD, MASS.—The DARLING STEAMER PUMP & MFG. CO., Williamsport, Pa., has been awarded contract for supplying valves to Water Board.

SPRINGFIELD, MASS.—The Water Commissioners have awarded contract for 4,000 lbs. of lead pipe to the C. S. MERSICK CO., of New Haven, Conn., at $4.75 per 100 lbs.

HINGHAM, MASS.—The McCAY ENGINEERING CO., 9 E. Lexington St., Baltimore, Md., has been awarded the contract for installing a complete water-works plant for the new naval magazine at Hingham, at about $8,000.

PROVIDENCE, R. I.—The Board of Contract and Supply on Nov. 19 awarded contracts for six centrifugal pumps and appurtenances to be installed at pumping station at Field's Point to the PROVIDENCE ENGINEERING CO., at $26,500.

NEW LONDON, CONN.—The STANDARD C. I. PIPE & FOUNDRY CO., of Bristol, Pa., has secured contract for 767 tons of 24-in. c.-i. pipe at $24.60 per ton, and 12,000 lbs. specials at 2.6 cts. per lb.; total cost, $19,182. Bids were opened on Nov. 12. W. H. Richards is Engr. Water and Sewer Dept.

*NEW YORK, N. Y.—Contracts have been awarded by the Board of Water Supply as follows: Contract No. 10, for the construction of the head works of the Catskill Aqueduct, bids for which were opened on Nov. 24, to JULES BREUCHAUD, 290 Broadway, New York, at $1,166,600. Contract No. 20,

for the construction of the Hurley dikes for the Ashokan reservoir, bids for which were opened on Nov. 24, to MacARTHUR BROS. Co., 11 Pine St., New York, at $971,275. List of bids and itemized prices are given in this issue under Contract Prices.

NEW YORK, N. Y.—Bids were received on Dec. 3 by John H. O'Brien, Comr. Water Supply, Gas and Electricity, for furnishing, delivering and laying a trunk distributing main in Albany, Clarkson, Woodruff, etc., Aves., and in 15th St., Brooklyn: Newman & Carey Co., 215 Montague St., Brooklyn, $264,019; Harlem River Contracting Co., 2 Rector St., New York, $260,688; Murphy Bros., 25th St., Bath Beach, Brooklyn, $271,368; Michael J. Dady, 350 Fudton St., Brooklyn, $304,072; Robert Carter Co., 551 Prospect Pl., Brooklyn, $259,416.

Bids are asked by John H. O'Brien, Comr. Water Supply, Gas and Electricity, until 2 p. m., Dec. 10 (postponement from Dec. 3), for furnishing, delivering and laying a trunk distribution main and appurtenances in Glenmore, Pennsylvania and Bushwick Aves., and in Madison St., Boro. Brooklyn.

NEW YORK, N. Y.—Bids are asked by the Board of Water Supply until 11 a. m., Dec. 21, for Contract No. 9, for the construction of Kensico Dam, a high masonry dam across the valley of the Bronx River, and appurtenant works, including New Rye reservoir, New Rye Dike, Bronx-Rye tunnel, Bronx dike and Rye pipe line. J. Waldo Smith is Ch. Engr.

Bids are asked by John H. O'Brien, Comr. Water Supply, Gas and Electricity, until 2 p. m., Dec. 14, for furnishing, delivering and laying water mains in various streets, Boro. Richmond.

MOUNT KISCO, N. Y.—Bids are asked until 2 p. m., Dec. 14, by John H. O'Brien, Comr. Water Supply, Gas and Electricity, for furnishing all labor and materials required and constructing and installing two direct connected electrically driven vertical pumping units, complete, with all appurtenances, including electric lighting installation, in the pumping station to be erected for the sewage disposal plant at the Village of Mount Kisco.

BUFFALO, N. Y.—Bids will be received until Dec. 16 by Francis G. Ward, Comr. Pub. Wks., for a 12-in. high pressure fire pipe line and conduit, from the present fire line at Pearl and Genesee Sts., through Pearl St. to Huron St., and through Huron St. to the end of the high pressure fire pipe line at Huron and aMin Sts., with all necessary connections, valves, hydrants, conduits and drains, bids on labor and material to be stated separately.

YOUNGSTOWN, N. Y.—Contract will not be let until spring for the construction of proposed water-works. Estimated cost, $23,000. J. P. Witmer, Chapin Block, Buffalo, is Engr.

JERSEY CITY, N. J.—Bids were opened on Nov. 22 by the Board Street and Water Commissioners for furnishing 200 lengths of 6-in., 3,000 lengths of 8-in., 500 lengths of 12-in. and 200 lengths of 20-in. c.-i. water pipe. The lowest bid receiver was submitted by the U. S. Cast Iron Pipe & Foundry Co., 71 Broadway, New York, at $24.30 per ton.

PHILADELPHIA, PA.—See item under Buildings.

NEW BEDFORD, PA.—A large reservoir is to be constructed at Coltsville Center, near New Bedford, by the Republic Iron & Steel Co., in order to secure a sufficient supply of water to operate those plants. About 255 acres have already been optioned, while about 500 acres in all will be needed. The dam will be located along Dry Run, between two bluffs about 100 ft. high and 120 ft. apart. Estimated cost, about $1,000,000.

KEY WEST, FLA.—Contract for constructing concrete cisterns at the naval station, Key West, bids opened on Nov. 6, has been awarded to BRYAN & CO., of Jacksonville, Fla., at $19,950. Bids noted on Nov. 11.

LAKELAND, FLA.—See item under Light and Power Plants.

FORT DADE (Egmont post-office), FLA.—Bids are asked by the Constructing Quartermaster, U. S. A., Fort Dade, until 8 p. m., Dec. 17, for constructing nine cypress cisterns at Forts Dade and De Soto, Fla.

MOBILE, ALA.—Bids for work on the sluiceway at the city pumping station at Spring Hill have been received. The MOSAIC FLOORING WORKS was low bidder at $5,450 and secured contract.

VICKSBURG, MISS.—The Vicksburg Water-Works Co. has awarded contract to A. M. LOCKETT & CO., New Orleans, La., for a 6,000,000-gallon pumping engine to be installed in the water plant.

COLUMBIA, MISS.—Bids were opened on Nov. 18 for constructing extension of the water-works, from plans of E. Blanchard, of Columbia, to consist of furnishing and laying approximately 4,940 ft. of 6 and 4-in. c.-i. pipe, with one ton of special castings, four valves and eight hydrants. Contract for the material has been awarded to W. V. O'ROURKE, of New Orleans, La., and for laying pipe, etc., to XAVIER A. KRAMER, of Magnolia, Miss.

*LOUISVILLE, KY.—Bids are asked until noon, Dec. 24, by the Commissioners of Sewerage for the construction of a sewer known as the Jane St. sewer, Contract 59, of the Comprehensive System of Sewerage.

Bids are asked by the Commissioners of Sewerage until noon, Dec. 31, for the construction of Section "F," Georgrass Intercepter, Contract 60. J. B. F. Breed is Ch. Engr. For details see advertisements in this issue.

*GRAND RAPIDS, MICH.—Bids were opened by the Board of Public Works, William M. Gormley, Pres., on Nov. 15, for furnishing and erecting two water tube boilers or two internally fired boilers, with Morison corrugated furnaces, having a capacity of 250 to 375 HP. each, at the combination pumping and lighting station. Contract has been awarded to the ARBUCKLE-RYAN CO., of Toledo, Ohio.

*GRAND RAPIDS, MICH.—Bids will be received by the Board of Public Works until 8 p. m., Dec. 16, for furnishing, constructing and erecting mechanical furnace equipments for two boilers at the combination pumping and lighting plant. Samuel A. Freshney is Secy. and Gen. Mgr.

MILWAUKEE, WIS.—The Board of Public Works has let contract to GEORGE W. JACKSON CO., 756 W. Jackson Boulevard, Chicago, at $24,000, for building a tunnel under the Milwaukee River at East Water St., to Ferry St. Charles J. Poetsch is City Engr.

STOUGHTON, WIS.—Bids are asked until noon, Dec. 15, by L. C. Currier, City Clk., for the construction of an artesian well for the city.

ST. PAUL, MINN.—Bids were opened on Nov. 22 by the Board of Water Commissioners for furnishing and delivering f. o. b. cars St. Paul about 60,000 lin. ft. of 6-in., 15,000 ft. 8-in., 12,000 ft. of 12-in., 9,000 ft. of 16-in c.-i. water pipe. Contract has been awarded to the AMERICAN WATER PIPE CO., of Birmingham, Ala., at $71,541.

GILBERT, MINN.—The VIRGINIA PLUMBING & CONTRACTING CO., Virginia, Minn., has been awarded contract for the excavation of 7,000 ft. of trench for water mains and furnishing about 8,000 ft. of pipe from 4-in. to 10-in., according to the specifications of the City Engineer.

MARION, KAN.—See item under Light and Power Plants.

CONRAD, MONT.—See item under Light and Power Plants.

CONWAY, ARK.—The city will spend from $50,000 to $75,000 for water-works. G. W. A. Wilson is interested.

DUMAS, ARK.—P. H. PORTER, Clinton, Ky., has been awarded contract at $5,800 for furnishing and laying 1,000 ft. of 2-in. galvanized iron pipe in 2-ft. trench with ¾ x 2-in. T every 50 ft. at 23 cts.; 6,000 ft. 4-in. c.-i. pipe, Class B, in 2-ft. trench, 50 cts.; four valves and boxes, 4-in, 150 lbs. pressure, at $8 each; eight valves and boxes, 2-in., at $5 each; 34 Corey hydrants, with 4-in. connection; and two 2½-in. nozzles in 2-ft. trench, $24 each; building frame pumphouse, 18 ft. x 24 ft., cover, floor, sealed throughout; deep well pump for 6-in. casing complete with power head, in place and fully connected up; placing 4-in. riser pipe to 75-ft. tank, in place.

Contract has been awarded to G. F. HALLOWAY, for 6-in. well, cased with standard pipe; 6-in. strainer for 200 ft. or less, for extra depth to 800 ft., $4 per ft. Lund & Hill are Engrs., Little Rock, Ark.

MILES STATION, TEX.—The citizens have voted to issue $20,000 of bonds for the construction of the water-works system.

ATLANTA, TEX.—Bids will be received until Dec. 20 by the city for the construction of water-works and for furnishing two gas engines, two pumps, one air compressor, etc. Fountain-Shaw Engineering Co. are Engrs., Houston.

ARDMORE, OKLA.—The city has decided to construct water-works and sewer extensions, to include filtration plant, improvements on dam, construction of two septic tanks, etc. Estimated cost, $155,000. Contracts will be awarded about Jan. 1. H. H. Sayre is City Engr.

LAWTON, OKLA.—KIRBY, MAYFIELD & SHAW have been awarded contract for improvements to the water-works at $14,000. J. S. Bayless, of Lawton, is Engr.

FORT SILL, OKLA.—Bids will be received by Capt. David L. Stone, Constructing Q. M., U. S. A., until Dec. 23, for sinking a tubular well at Fort Sill.

PUEBLO, COLO.—The Canon City, Florence & Pueblo Water Co. has been organized with a capital of $300,000, to construct an irrigation system in the Arkansas Valley. Articles of incorporation were filed in Denver on Nov. 24. James H. Blood, Denver, is interested.

NORTH YAKIMA, WASH.—The Rose Land Co. has awarded contract for constructing a pumping plant near Beverly on the Columbia River to Theodore Weisburger, of North Yakima, at $24,881.

SULTAN, WASH.—We are officially advised that bids were opened on Dec. 1 by Thomas W. Musgrove, Town Clk., for constructing the water system. All were rejected and new bids are asked until Dec. 15, original plans to be greatly modified. E. Colburn, Snokornish, Wash., is Engr.-in-Charge.

SPOKANE, WASH.—The ALLIS-CHALMERS CO., Milwaukee, Wis., has been awarded contract by city for furnishing three 7,500,000-gallon multi-stage centrifugal pumps and three induction pumps, switchboard and connection at $33,904.

SAN JACINTO, CAL.—L. O. Pierce of San Jacinto, will erect a pumping plant on his property near here.

SAN FERNANDO, CAL.—The Valley Homes Co., organized by Los Angeles, Cal., business men, has purchased 1,100 acres in San Fernando, for farming and town purposes, which will be irrigated and divided in small sections. L. A. Thompson, E. J. Daniels, George R. Patterson, of Los Angeles, are among the directors.

SANTA ROSA, CAL.—The City Council has ordered plans and specifications to be prepared for two wells and pumping stations. A large air compressor for irrigating purposes will be installed.

SAN FRANCISCO, CAL.—On Nov. 22 the Board of Supervisors passed the ordinance ordering the construction of pumping station No. 1 of the auxiliary water system at a cost not to exceed $400,000. Marsden Manson is City Engr.

PHOENIX, ARIZ.—The Secretary of the Interior Department has awarded contracts on Salt River project, Arizona, as follows: Nine induction motors at $4,428, to GENERAL ELECTRIC CO., Schenectady, N. Y.; nine transformers, at $6,110, to ALLIS-CHALMERS CO., Milwaukee, Wis.; switchboards, switches, instruments, and auxiliary apparatus for nine induction motors, at $2,322, to WESTINGHOUSE CO., Pittsburg.

PARK CITY, UTAH.—Bids will be received about Dec. 10 by the Water Commision, H. W. Deighton, Chn., for constructing waterworks from plans of Chas. P. Brooks, 228 Dooly Blk., Salt Lake City.

SALT LAKE CITY, UTAH.—The only bid received by the Board Public Works for installing a reinforced-concrete diverting weir in Parley's Creek at Twelfth South St., has been submitted by McKay & Reed at $6,743. The bid was rejected as excessive.

SEWERAGE.

ROCKLAND, ME.—The city will probably construct a trunk line sewer during 1910. Estimated cost $100,000.

PROVIDENCE, R. I.—Bids are asked until 2 p. m., Dec. 21, by the Board of Contract and Supply for furnishing and delivering to the Department of Public Works in the city yard, South Providence, the following sewer materials: 6,000 ft. of 12-in. straight pipes; 20,000 ft. of 8-in. straight pipes, 2-ft. lengths; 10,000 ft. of 6-in. straight pipes, 2-ft. lengths; 200 ft. of 6-in. straight pipes, 1-ft. lengths; 75 ft. of 12 x 8-in. branch pipes; 1,200 ft. of 12 x 6-in. branch pipes; 100 pieces of 6 x 6 x 6-in. "Y" branch pipes; 75 pieces of 8-in. 1-16 bends; 300 pieces of 6-in. ⅝ bends; 25 pieces of 8-in. bevel connections; 200 pieces of 6-in. bevel connections 24 ins. long; 500 6-in. covers.

ANSONIA, CONN.—The Sewer Commissioners propose to extend the present sewer system. Estimated cost, $75,000. The first work will be extension of a 45-in. trunk line of about 1,000 ft. below the water level of the river. Laterals will then be built and the general extension of the system will then begin. Bids will probably be asked in the early spring. Vincent B. Clark, of Ansonia, is Engr.

HARTFORD, CONN.—The City Engineering Department is preparing plans for the construction of the first section of the intercepting sewer which is to be a part of the plan of protecting the east side from the flood nuisance.

NEW YORK, N. Y.—SMITH & FITZGERALD have been awarded contract, at $6,190, for the reconstruction of outlet sewer and appurtenances into Harlem River, between 134th and 135th Sts., and in Park Ave., between 134th and 135th Sts.

Bids are asked until 11 a. m., Dec. 16, by John F. Murray, Pres. Boro. the Bronx, for constructing sewers, temporary sewers, sewer basins and appurtenances in various streets, and for regulating, grading, building approaches and placing fences and laying vitrified pipe in Randall Ave., from Leggett Ave. to the Bronx River.

Bids were received on Nov. 30 for constructing a relief drain in Morris Park Ave. from existing drain to a point about 50 ft. east of Victor St. to the existing outlet at a point 150 ft. west of Taylor St.: W. J. Brennan, $17,422; Voorhees & Sullivan, $27,938; Perillo Contracting Co., $17,982; Haggerty Contracting Co., $20,246; J. J. Huldusen, 60 East 177th St., $17,513; William Stelter, $16,642; McDonald & Barry, $17,071; Alamo Contracting Co., $17,745; LEAHY CONTRACTING CO., 1446 Prospect Ave., $15,112 (awarded contract); W. F. Murray, $20,424.

NEPTUNE, N. J.—JOHN R. JEFFREY, Pearl St., South Elberon, has been awarded contract for constructing 7½ miles of sewer in West Grove by Township Committee, at $32,885. There were seven bidders.

ROSELLE PARK, N. J.—MARTIN & MILLER, Seneca Falls, and not Martin Miller, as incorrectly stated last week, was awarded contract for the construction of extensions to sewer system, bids opened on Nov. 19.

MEADVILLE, PA.—TONY CARAVELLA has been awarded contract for constructing sewers in Clark and Porter Sts.

PITTSBURG, PA.—Bids are asked until 10 a. m., Dec. 13, by the City Controller for the construction of sewers in various streets. Joseph G. Armstrong is Dir. Pub. Wks.

*WASHINGTON, D. C.—Bids were received on Dec. 6 by the Commissioners of the District of Columbia for the construction of sewers in Langdon, D. C. The bidders were: E. G. Gummel; George Hyman, James A. Coyle, O. P. Allen, Thomas A. Barry & Co., Richmond, Va., Warren F. Brenizer & Co., I. H. Fisher, Howard R. Bitting, and United Engineering & Construction Co., Baltimore, all of Washington unless otherwise stated. E. G. Gummel was the lowest bidder on Sewers D, E, G, H and I, and James A. Coyle on Sewers A, B, C and F.

LOUISVILLE, KY.—Bids were opened by the Commissioners of Sewerage, P. L. Atherton, Chn., on Nov. 26, for construction of Jefferson St. sewer, Contract 57. Contract has been awarded to E. A. BARKER & SON, of Louisville. Estimated cost, about $6,000. J. B. F. Breed is Ch. Engr., Louisville. Harrison P. Eddy is Consulting Engr., 14 Beacon St., Boston, Mass.

NEWBURG, OHIO.—Bids are asked by E. T. Lawrence, Clk. Bd. Pub. Ser., until noon, Dec. 29, for constructing sewer mains in various streets.

ELYRIA, OHIO.—HARRY BAXTER, of Lorain, Ohio, was awarded contract on Nov. 24 by the County Commissioners for constructing a large sewer. The sewer will run from the County Infirmary to the Elyria city sewer system. Estimated cost, about $5,000.

EVANSVILLE, IND.—Bids for the construction of three sewers were received by the Board of Public Works on Nov. 20 as follows: Blackford Ave. sewer, Newman Sewer Construction Co., $9,194; John L. Newman, $9,207. Sewer in alley between Monroe and Jackson Aves., from Garvin St. east, Hughes & Co., 59 cts. per ft. for 12-in. pipe and 49 cts. for 10-in. pipe. Sewer between Michigan and Virginia Sts., Hughes & Co., 53 cts. for 10-in. pipe.

MUSKEGON, MICH.—Bids will be received until Jan. 3 by the City Council for constructing the uncompleted sewer in District No. 7. B. H. Tellman is City Recdr.

*DETROIT, MICH.—Bids for furnishing and erecting machinery for a sewage pumping station to be located at the foot of Park View Ave. will be received by the Department of Public Works at the office of Jacob J. Haarer, Comr., until 10 a. m., Jan. 5. Proposals shall include two centrifugal pumps, capacity 100 cu. ft. per second, one centrifugal pump, capacity 30 cu. ft. per second; engines, motors, boilers and other machinery and apparatus necessary for a complete installation.

EAST ST. LOUIS, ILL.—Bids will be received until Dec. 10 by the Board of Public Works for constructing a vitrified pipe sewer system in Illinois Ave., requiring 15 to 24-in. pipe. Estimated cost, $50,000. W. J. Crocker is City Engr.

CHICAGO, ILL.—Bids will be received by John J. Hanberg, Comr. Pub. Wks., until Dec. 11, for constructing a tile sewer in Grove St. and Lafayette Ave.

SYCAMORE, ILL.—GEORGE A. PETER, Sycamore, Ill., has been awarded contract, at $5,038, by the city, for constructing 6,655 ft. of 8, 10 and 12-in. sewers. Bids were opened on Nov. 24. W. M. Hay, Sycamore, is Engr.

ALTON, ILL.—CHARLES H. DEGENHARDT, Alton, Ill., has been awarded contract by the Board of Local Improvements, at $18,798, for the construction of about two miles of sewers in State and Elm Sts. Bids were opened on Nov. 26.

CHICAGO HEIGHTS, ILL.—The Board of Local Improvements has instructed A. L. Fox, City Engr., to prepare plans and specifications for ten miles of storm water sewers of 15 to 60-in. diameter; also 15 miles of sewers, 8 to 24-in. diameter, to be constructed during 1910 and 1911.

Bids will be received by the Board of Local Improvements until Dec. 14 for the following sewer work: 998 ft. of 36-in. and 3,399 ft. of 30-in. monolithic concrete sewer; 2,866 ft. of 24-in., 2,367 ft. of 18-in. and 6,742 ft. of 15-in. vitrified tile sewer, with 148 catch basins and 57 manholes.

ROCK ISLAND, ILL.—Bids were opened on Nov. 22 for the construction of the Sixth Ward sewer. The lowest bid was that of the People's Construction Co., of Davenport, Iowa, as follows: 11,315 ft. of 10-in. sewer pipe, 95 cts.; 2,085 ft. 12-in., $1.20; 1,120 ft. 15-in., $1.50; 2,570 ft. 18-in., $1.75; 5,297 ft. 24-in., $2.50; 885 ft. 36-in., $6.25; 1,075 ft. 30-in., $4.75; 650 Ys, each $3.50, and 17 manholes, each $55. Total, $47,583. Other bids were: G. F. Lambert, Des Moines, Iowa, $55,910; P. F. Trenkenschuh, Rock Island, $51,210; Tri-City Construction Co., Davenport, $49,781; Drainage Contracting Co., Chicago, Ill., $54,520. Wallace Treichler is City Engr.

DAVENPORT, IOWA.—LLOYD & CO. have been awarded contract, at 89 cts. per lin. ft., for the construction of the sewer in Eastern Ave., between Fulton Ave. and Valley St.

CLINTON, IOWA.—Bids will be received until Dec. 14 by William E. Hayes, City Clk., for constructing a sewer here.

TOPEKA, KAN.—John P. Rogers, City Engr., in his annual report, has recommended the construction of a 36-in. sewer between Kansas Ave. and Jackson St. and between Kansas Ave. and Quincy St., from Tenth Ave. to the Kaw River.

COLUMBIA, MO.—The City Engineer is preparing plans and specifications for the construction of about 50,000 ft. of district sewers. John S. Bicknell is City Clk.

MORRILTON, ARK.—The Sewerage Commissioners have had plans and specifications prepared for the construction of a sewerage system. Estimated cost, $10,000.

LUBBOCK, TEX.—The city has engaged E. Leon Dalton, Dallas, Tex., as engineer for sanitary sewer extension and water-works. Estimated cost, $60,000.

OKLAHOMA CITY, OKLA.—Bids are asked by the city until Dec. 13 for the construction of a lateral sewer in Bellemonde, Epworth View and Military Park additions; also for construction of Military Ave. Main storm sewer and until Dec. 20 for construction of Deep Fork sewage disposal works and septic process. Bob Parman is City Clk.

J. O. SEVERNS, of STOKES & McCREDIE, has been awarded contract for the construction of the following sewers: Kate Ave. storm sewer system, Kelly and Laird Aves. storm sewer system, and east side main sanitary sewer system.

GUTHRIE, OKLA.—Bids are asked until 5 p. m., Dec. 16, by A. A. Leer, City Clk., for the construction of district sewers in Districts 50 and 54.

HOLLY, COLO.—DAVIS, WALL & BLAIR, Joplin, Mo., have been awarded contract, at $18,500, for the construction of a sewer here. W. T. Palmer Co are Engrs., Kansas City, Mo.

SEATTLE, WASH.—The Board of Public Works has awarded the following contracts for street improvement work: 16th Ave. N. W. and other streets, sewers, to IDE & JONES, at $19,589; 15th Ave. N. E. and other streets, sewers, to INTERNATIONAL DREDGING CO., at $4,905; West 60th St. and other streets, sewers, to V. RAMAGALIA, at $2,185; Jackson St. and other streets, sewers, to T. RYAN, at $37,747.60.

PORTLAND, ORE.—J. W. Morris, City Engr., has prepared plans and specifications for a chain of sewers for the Powell St. district. Estimated cost, $18,410. With the laterals and secondary sewers already pre-

vided for in the Brooklyn district, and the Powell St. chain of sewers, the cost of sewers projected will amount to about $80,000.

FITCHBURG, CAL.—The PIEDMONT PAVING CO. has secured contract, it is reported, for constructing the sewer system here. Bids opened on Nov. 9.

SAN FRANCISCO, CAL.—The Board of City Supervisors has passed ordinances providing for the construction of sewers as follows: In the Hunter's Point district, estimated cost, $190,000; in Section B of the North Point sewer, $96,000; in Fulton St., between 30th and 48th Aves., $65,000; in 31st and 32d Aves. and Clement St., $12,000. Marsden Manson is City Engr.

ELY, NEV.—We are officially advised that Alfred B. Colwell, City Engr., has been authorized to retain the services of Alexander Potter, Consulting Engr., 116 Liberty st, New York, in connection with the design of a sewage disposal plant for the city. The plant will be constructed in the spring of 1910.

BLACKFOOT, IDAHO.—Bids will be received by the Sewer Commission, C. W. Berryman, Chn., until Dec. 21, for constructing sewer system from the plans of Louis C. Kelsey, of Salt Lake City, Utah. Bond issue $41,000.

MONTREAL, QUE.—HENEALUT & HEFFERNAN have received contract, at $25,261, for building the last section of the Sherbrooke St. sewer.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

NEW YORK, N. Y.—Bids are asked by the Park Board Henry Smith, Pres., until 3 p. m., Dec. 16, for completing the grading and for laying asphalt block pavement on the roadway on the southerly side of the Bronx and Pelham Parkway, from White Plains road to the bridge over the tracks of the New York, New Haven & Hartford Railroad, Boro. of the Bronx.

Bids are asked until 2 p. m., Dec. 14, by John F. Ahearn, Pres. Boro. of Manhattan, for paving with asphalt block and sheet asphalt various streets in the Boro. of Manhattan.

The folowing bids were received on Nov. 30, by George Cromwell, Pres. Boro. of Richmond, for regulating and repaving with vitrified brick pavement on a concrete foundation the gutters of Bement Ave., from Richmond Terrace to Cary Ave. and other streets, together with all work incidental thereto: JOSEPH JOHNSON'S SONS 193 Broadway, West New Brighton, S. I., $7,129 (awarded contract); Thos. F. Carlin, $7,727; Joseph L. Segrette, $7,293; Dominick Bonacci, $7,326; John E. Donovan, $8,068.

Contracts have been awarded by John F. Murray, Pres. of the Boro. of the Bronx, as follows on bids received Nov. 30: For repaving with granite blocks or with asphalt blocks on a concrete foundation the roadway of Park Ave. East, from East 158th St. to East 161st St., and setting curb where necessary, to the ASPHALT CONSTRUCTION CO., 137th St. and Madison Ave., at $12,088; for repaving with old granite blocks on a concrete foundation the roadway of East 151st St., from Park Ave. to Courtlandt Ave.; East 155th St., from Morris to Courtlandt Aves; East 157th St., from Melrose to Third Aves; East 157th St., from Park to Courtlandt Aves.; East 159th St., from Courtlandt Ave.; East 159th St., from Courtlandt to Third Aves.; East 160th St., from Courtlandt to Elton Aves.; East 161st St. from St. Ann's to Cauldwell Aves.; and Melrose Ave., from 149th to 163d Sts., and setting curb where necessary, to the ASPHALT CONSTRUCTION CO., $82,131.

Paving contracts have been awarded by John F. Ahrens, Pres. of the Boro. of Manhattan, on bids received on Nov. 22, as follows:

For regulating and repaving with asphalt pavement on concrete foundation the roadway of Attorney St., from the north side of Division St. to the south side of Grand St., to SICILIAN ASPHALT PAVING CO., 41 Park Row, $2,475; for regulating and repaving with wood block pavement on concrete foundation the roadway of Delancey St., from 112.5 ft. east of Ridge St. to the west side of East St., to REPUBLIC CONSTRUCTION CO., 18 Broadway, $36,919; the roadway of Bedford St., from the north side of Houston St. to the south side of Grove St., to REPUBLIC CONSTRUCTION CO., $12,846; for regulating and repaving with asphalt block pavement on concrete foundation the roadway of West End Ave., from the north side of 62d St., to the north side of 69th St., to HARLEM CONTRACTING CO., 2 Rector St., $39,291; for regulating and repaving with granite block pavement on concrete foundation the roadway of Charlton St. from the west side of Greenwich St. to the east side of West St., to WILLIAM J. FITZGERALD, 547 West 45th St., $6,979; the roadway of Vandam St., from the east side of Varick St. to the west side of Greenwich St., to WILLIAM J. FITZGERALD, $10,795; the roadway of Pearl St., from the north side of New Bowery to the south side of Park Row, to WILLIAM J. FITZGERALD, $11,019; the roadway of Beach St., from the west side of Varick St. to the east side of West St., to RAFFERTY BROS. 624 West 52d St., $15,355; the roadway of Harrison St., from the east side of West St. to the west side of Houston St., to WILLIAM J. FITZGERALD, $12,933; the roadway of Rose St., from the north side of Frankfort St. to the south side of Pearl St., to WILLIAM J. FITZGERAD, $6,457; the roadway on 147th St., from 250 ft. west of the west house line of Broadway to the Riverside Drive wall, to WILLIAM J. FITZGERALD, $752; for flagging and reflagging westerly sidewalk and flagging and reflagging and sodding the easterly sidewalk of St. Nicholas Terrace, from 135th St. to the junction with Convent Ave., to DENNIS McCARTHY, $3,645; regulating and repaving with sheet asphalt pavement on concrete foundation the roadway of Ave. C., from the south side of Twelfth St. to the south side of 14th St., to SICILIAN ASPHALT PAVING CO., $7,155.

NEW YORK, N. Y.—See item under Sewerage.

NEW YORK, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., Dec. 22, for regulating, grading and paving various streets in Brooklyn.

TRENTON, N. J.—The Board of Freeholders has awarded to the UNITED PAVING Co., the contract for resurfacing Chambers St., from Hamilton Ave. to Liberty St., with warrenite, at a cost of $6,700.

PITTSBURG, PA.—Bids are asked until 10 a. m. Dec. 13, by Joseph G. Armstrong, Dir. Dept. of Public Works, for grading, curbing and paving with repressed vitrified brick. Class A, Eldridge Ave., from Nicholson to Pocussett St.; Sanford Ave., from Nicholson St. to Shady Ave.; paving with stone block, Class B, South 33d St., from Harcum's Alley to Jane St.

ASHEVILLE, N. C.—The Board of Aldermen have awarded the contract for macadamizing a portion of Spring St., to FRENCH, BROAD QUARRY CO., for $7,235.

The contract for the construction of the proposed 30-ft. boulevard through the property of the Kenilworth Land Co., was awarded to B. J. LUTHER & CO. It is hoped within a few months to have a fine driveway constructed through the property. The estimated cost of the improvement is $10,000. The road which begins at a point nearly opposite the Normal and Collegiate Institute will be of an easy grade, and circle the hills, and wind around into the Swannanoa Road. At one place it will be necessary to construct a bridge across a ravine. The contracts for the bridge timbers have been awarded to the GLEN INGLIS LUMBER CO. and D. W. ALLMAN & CO. From the main boulevard other roads are planned to be constructed to open up the building sites.

*LENOIR, N. C.—Bids are asked by the Lenoir & Blowing Rock Turnpike Co., of Lenoir, until 7 p. m., Jan. 5, for grading and macadamizing about three miles of road near Lenoir, N. C., and macadamizing three additional miles to be graded by the company. R. L. Gwyn is Secy.-Treas.; C. M. Miller, Engr., Salisbury, N. C.

ST. PETERSBURG, FLA.—Bids are asked by W. J. Overman, City Engr., until Dec. 15, for 15,000 sq. yds. of brick paving and 2,270 lin. ft. of granite curb.

*JACKSONVILE, FLA.—See item under Miscellaneous Contracts—Rollers.

*JACKSONVILLE, FLA.—Bids will be received by the Board of County Commissioners at their office in the Court House, Jacksonville, Fla., until 9.30 a. m., Jan. 5, for resurfacing approximately 25 miles of county roads in Duval County. Gail L. Barnard, Jacksonville, is County Engr.

JENNINGS, LA.—DE JERSEY & BERNARD, of Minden, La., cement contractors, who have been awarded the contract to build seven or eight miles of cement sidewalk and curbing will start work at once. The total cost of the work will approximate $30,000.

MEMPHIS, TENN.—The city will extend and pave North Seventh St., from the former city limits to the new limit of the annexed territory at Maple St. An ordinance carrying this provision was passed on final reading in the joint session of the Legislative Council on Nov. 29. The work will be done under the front foot improvement law, and is estimated to cost $12,000. The Council has ordered that curbs and gutters be laid on McNeill St. from Court Ave. south to Union St.

CINCINNATI, OHIO.—Bids are asked until noon, Dec. 13, by the Board of Park Commissioners for grading and landscaping Hubbard Tract.

BELLEVILLE ILL. — Contracts were awarded as follows on Nov. 23 by Board of Local Improvement for about 50,000 sq. yds. brick pavement on concrete foundation, 30,000 lin. ft. curb and about one mile of sewer to JOHN CHERRY, of Jacksonville, Ill.: Highland Addition Paving District, $30,351; D St., $20,565; Oak St., $10,855 and 3d St., $4,320; HOEFFKEN BROS., of Belleville. Walnut St. $12,922; REEB BROS., of Belleville, Douglas Ave., $9,533.

STREATOR, ILL.—It is proposed to lay about 10,786.9 sq. yds. of brick pavement at a cost of about $20,044. The date is not yet set for receiving of the bids. John B. Patterson, is City Clk.; F. W. Herbert is City Engr.

CHICAGO HEIGHTS, ILL.—The Board of Local Improvement has instructed A. L. Fox, City Engr., to prepare plans and specifications for brick pavement, on concrete foundation, asphalt or tar fill, on Chicago Road, Main St. West End Ave, and 19th Place, approximately 40,000 sq. yds. to be constructed in 1910.

EAST ST. LOUIS, ILL.—Bids will be received until Dec. 10 by the Board of Public Works, for paving with vitrified brick on a concrete foundation, Illinois Ave. Cost, $90,000.

CHICAGO, ILL.—The surface plan for a Michigan Ave. Boulevard link, presented by the Michigan Avenue Improvement Association to the Chicago Real Estate Board, was formally approved by that body at a meeting held Dec. 1, and a resolution was passed directing that the formal action of the board shall be presented to the subcommittee appointed by the Mayor recently. The resolution recited that by taking the west 50 ft. of the property having a west frontage on Michigan Ave., between Randolph and River Sts., it will be possible to construct a boulevard having a roadway 75 ft. in width conforming exactly to the roadway now established by the South Park Commissioners from Jackson Boulevard to Twelfth St.

DUBUQUE, IOWA.—Bids are asked until 8 p. m., Dec. 10 by Edmund A. Lineman, City Recdr., for the completion of the contract for the improvement of Bluff St., from Third St. to Eighth St.

ST. PAUL, MINN.—L. W. Rundlett, City Engr., is preparing plans for the paving of Dayton Ave. with asphalt from Summit Ave. to Avon St. Bids may be advertised for early in the spring. Cost, $25,000.

OTTAWA, KAN.—F. A. Marcell, City Clerk, advises us that the advertisement for paving bids to be received until Dec. 15, noted in Engineering News last week, has been recalled and probably will be republished some time in January or February next. A. H. Slater is Mayor; C. S. Pugh is City Engr.

GRAND FORKS, N. DAK.—Bids probably will be received in February for about 200,000 sq. yds. of creosote, Blome bitulithic or Donnellite pavement. Cost, $400,000. Ray E. Wickham, City Engr.; W. H. Alexander is City Audr.

ST. JOSEPH, MO.—The following bids have been received by the Board of Public Works for paving with brick a portion of Albemarle St.: U. G. RINEHART, $1.35 per sq. yd. (awarded contract); H. N. Rice, $1.37, and C. W. Dillingham, $1.67.

HOUSTON, TEX.—Bids are asked by the City Secretary until 4 p. m., Dec. 13, for paving the following streets, with vitrified brick: Main—Berry to Galveston Sts., Harrisburg & San Antonio railway crossing; San Jacinto, Leeland to McGowen Sts.; Travis-Dallas to Leeland Sts.; Washington, Brashar to Galveston Sts.; Harrisburg and San Antonio, west of right-of-way. H. B. Rice is Mayor; T. C. Tarver, Jr., City Engr.

CLAREMORE, OKLA.—Bids were received Nov. 15 for the construction of a brick pavement from plans of J. S. Worley Co., of Kansas City, Mo., and the contract has been awarded to the NEW STATE PAVING & CONSTRUCTION CO. of Tulsa, Okla., $58,355 using pitch filler, (to be completed in 3 mos.) Totals of other bids, using pitch filler are: Davis Construction Co., Muskogee, Okla., $62,014; Stuckey Construction Co., Muskogee, $58,475; McGuire & Stanton, Coffeyville, Kan., $60,034; G. A. Herman, Chickasha, Okla., $66,036; Tulsa Engineering & Construction Co., Tulsa, $69,916; Hipple & McSpadden, Vinita, Okla., $58,563; Gilkeson & Levy, Muskogee, $65,124.

LAS CRUCES, N. MEX.—Bids are asked until 10 a. m., Dec. 13, by the Board of Town Trustees for grading and macadamizing the following streets: Las Cruces Ave., between the west line of Main St. and the east line of Mesilla Road; Griggs St., from the west side of Main St. to the east side of Miranda St.; the intersection of Miranda St., between the west end of Griggs St. to the east end of Organ Ave.; and Organ Ave. between the west line of Miranda St. and the east line of Mesilla Road.

PUYALLUP, WASH.—The street paving plans of the City Engineer have been accepted by the City Council. Work on Pioneer Ave., between Walnut and Birch Sts., will cost, $44,710 for granatoid, $43,878 for asphalt, and $42,338 for bitulithic. The next district, beginning at Birch St. and going west on Pioneer Ave. to Thompson's Addition, will cost $17,275 for asphalt, $17,982 for granatoid, and $16,852 for bitulithic. The Tacoma Ave. improvement will cost $6,709 for asphalt, $6,929 for granatoid and $6,457 for bitulithic.

SEATTLE, WASH.—The Board of Public Works of the City of Seattle has awarded the following contracts: Grading North and East 58th St., to MOUGIN & PRICE, $7,588; Alley Block 66, A. A. Denny's Addition, paving brick, to COAST CONCRETE CO., at $2,127; East and West Greenlake Boulevard, etc., grading, etc., to HOLT & JAFFERY, $24,378.

SAN FRANCISCO CAL.—Sol Getz & Sons, 507 Devisadero St., intend to grade the Property Block 630 in Sunset District, bounded by H and I Sts., 43d and 44th Aves., pave the surrounding streets, and place the property on market.

STOCKTON, CAL.—Bids are asked until 5 p. m., Dec. 13, by the City Council for improving Poplar St., from the west line of Union St., to the west line of East St., by grading, and macadamizing. R. C. Tumelty is City Engr.

*SALT LAKE CITY, UTAH.—Bids will be received at this office of the Board of Public Works H. G. McMillan, Chn., until 8 p. m., Dec. 24, for the work of grading, curbing and paving First Ave., from J St. to Virginia St. Paving Extension No. 51; for the work of grading, curbing and paving Ninth East St., from South Temple St. to the City Limits, Paving Extension No. 60; for the work of constructing cement sidewalks in Sidewalk Extension No. 136. George O. Chaney is City Engr.

TORONTO, ONT.—The cost of widening St. Clair Ave., between Yonge and Bathurst Sts., is estimated by the Assessment Commissioner and C. H. Rust, City Engr., at $170,000. This includes land damages and a fill required by reason of the low grade of the street between Bathurst St. and Kendal Ave. If the work is done on the local improvement plan there will be 9,696 ft. of assessable frontage on St. Clair Ave. at the rate of $12 per ft. or for a period of ten years 1.53 per ft. and 10,220 ft. of assessable frontage on all the lateral streets, at $5.25 per ft., or 67 cts. per ft. for ten years.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

FALL RIVER, MASS.—Plans will be prepared by William T. Henry, Engr., Borden Block, South Main St., for an addition to No. 2 Mill of the Stafford Mills, corner of County and Quarry Sts. Power equipment will be required.

BOSTON, MASS.—Press reports state that Armour & Co., of Chicago, Ill., has purchased the property of Batcheider & Snyder Co., in Brighton district of Boston. The plant has facilities for slaughtering 2,500 hogs and 100 cattle a day. The cattle department will be extended at once and one for sheep slaughtering added. The plant is on the main line of the Boston & Albany division of the New York Central and has connection with all the wharves and other railroads of Boston.

PAWTUCKET, R. I.—The Pawtucket Dyeing & Bleaching Co. has awarded the contract to build a plant in Lebanon, near Pawtucket, to the BENJAMIN F. SMITH CO., 22 Mason St., Pawtucket, R. I. The buildings include the following: 2-story main building, 75 × 150 ft.; 1-story dye and bleach house, 125 × 158 ft.; 1-story boiler house, 45 × 49 ft.; 1-story engine house, 57 × 57 ft.; 1-story filter house, [illegible] × 45. All the buildings will be brick, slow burning mill construction. Benjamin Bridley, 152 Garden St., Pawtucket, R. I., is Engr. Cost, $35,000.

NIANTIC, CONN.—The Niantic Menhaden Oil & Guano Co. will rebuild its plant at Giant's Neck destroyed once the by fire recently. Plans to that end are in preparation for reference to a meeting of the directors.

BRIDGEPORT, CONN.—CHARLES W. MURDOCK, 839 Chapel St., New Haven, Conn., has been awarded by the New York, New Haven & Hartford R. R. Co. the contract for building the proposed brick and concrete car barns of the Connecticut Co. in Bridgeport, foundations for which have been completed. The building is to cost about $150,000. The building is to cover [illegible] ft. and will be partly two stories high and partly one.

TAFTVILLE, CONN.—The Pequonnah Co. of Taftville, manufacturers of cotton fabrics, will erect a weave shed which will be practically a duplicate of the structure now building and will be located parallel to it. The dimensions will be 200 × 700 ft., with a cloth shed 100 ft. wide between the two structures.

MIDDLETOWN, CONN.—The Bagley-McDonnell Brick Co., of this city, has filed a certificate of incorporation. It has a capital stock of $10,000, and it will operate a brick manufacturing plant at Smith's Crossing. The incorporators are E. S. Bagley, J. J. McDonnell and Agnes McDonnell, all of Meriden.

BUFFALO, N. Y.—The New York Central & Hudson River R. R. Co. contemplates the erection of car repair shops at East Buffalo. An appropriation of $350,000 for same is included in the estimate of expenditures covered by the bond issue recently authorized by the Public Service Commission of the State of New York.

OSWEGO, N. Y.—G. W. Kittridge, Ch. Engr. New York Central & Hudson River R. R., Grand Central Station, New York, has preliminary plans for concrete and brick car shops to be erected at Oswego, to cost $75,000. A power plant will be required. Bids will be called for about Jan. 1.

AVIS, PA.—The New York Central & Hudson River R. R. Co. is having plans prepared for car repair shops for the Pennsylvania Division at this point to cost $340,000, the machinery equipment for which will cost $40,000 additional. G. W. Kittridge, Grand Central Station, New York, is Ch. Engr.

CHESTER, PA.—We are officially advised that Ballinger & Perrot, Archs. and Engrs., 1211 Arch St., Philadelphia, have awarded contract to WILLIAM PROVOST, Jr., of Chester, Pa., for a manufacturing plant to be erected at Marcus Hook, near Chester, for Samuel Courtauld & Co., Ltd., of England. The plant will be for the production of artificial silk, and will be of modern construction. The following buildings will be erected at this time: Main building, 130 × 400 ft., one story, with sawtooth skylights, adjacent to which will be an engine house, 54 × 150 ft., and boiler-house, 90 × 65 ft., both one story. There will also be a winding and sorting building, 76 × 131 ft., five stories in height, and two other manufacturing buildings, one 64 × 100 ft., one story, and the other 43 × 71 ft., two stories and basement. Of the above buildings, the 5-story winding and sorting building and some portions of the smaller buildings, will be of reinforced-concrete construction with brick walls, and the remainder will be of slow-burning wood construction with brick walls. The plans for the group of buildings are being so arranged that additions may be made in each department and it is possible that these additions will be made soon. Noted fully last week.

PHILADELPHIA, PA.—We are officially advised that the John B. Stetson Co., hat manufacturers, will begin work immediately on an addition to its plant at Montgomery and Germantown Aves., which will cost $250,000. A permit has been obtained by G. R. Kurrie, Engr., 637 North Watts St., for an 8-story and basement fireproof building, 50 × 340 ft., and for a rear building, 50 × 60 ft., at the northeast corner of Montgomery and Germantown Aves., on ground recently purchased by the company. The contract for foundations has been let to JAMES D. DORNEY, and for steel work to AMERICAN BRIDGE CO., 50 Church St., New York.

PHILADELPHIA, PA.—Estimates are being taken by Cramp & Co., Commonwealth Bldg., Philadelphia, on an ice manufacturing plant, 124 × 271 ft. 6 ins., of brick and concrete, to be built at the southeast corner of Ninth St. and Washington Ave., for the American Ice Co.

HARRISBURG, PA.—The Wellknit Hosiery Co. is contemplating the erection of a mill, three stories high, construction work to begin in three or four months. The mill probably will be 200 × 60 ft., built of concrete, iron and brick, and will cost approximately $40,000.

SEWARD, PA.—The Duroth Mfg. Co., with headquarters at Johnstown, Pa., will erect a plant for the manufacture of bronze castings at Seward, Pa. The company has purchased 20 acres of land formerly owned by the Cambria Powder Co. John Duroth is Pres. and Mgr.

PITTSBURG, PA.—Officials of the Clark Car Co., Frick Annex, Pittsburg, contemplate the erection of a car building plant in the vicinity of Pittsburg, where they will construct their own cars instead of sub-letting contracts to other companies. G. C. Clark.

Pres. and Gen. Mgr. of the company, has announced that when this will be done is uncertain. It is the plan to construct a plant capable of constructing 20 cars daily.

ATLANTA, GA.—The Fulton Foundry & Machine Works, Audubon Ave. and Courtland St., has secured a site on Angier Ave., upon which to erect a building for the purpose of the manufacture of grates, grate baskets, frames, window weights, etc.

NEW ORLEANS, LA.—The contract has been awarded by the Fulton Bag & Cotton Mills, of Atlanta, Ga., for the erection of its branch factory here. The main building will be 160 × 120 ft., five stories high. It will cost probably $100,000. A 10-story warehouse also will be erected. The company manufactures bags and has plants at Atlanta, New Orleans, St. Louis, Dallas and New York.

LOUISVILLE, KY.—The Jones Bros. & Co. and Tarbitt & Castleman, pickle and molasses manufacturers, have consolidated, and will be known as Jones Bros., Castleman & Blakemore Co. The new firm will erect an addition costing $125,000 to the plant of Jones Bros. & Co., at Eleventh and Magnolia Sts.

CINCINNATI, OHIO.—William Attlesey, 819 Vine St., is arranging to build a manufacturing plant, 90 × 70 ft., for the Attlesey-Dyer Co., at 1215 to 1223 Clay St. Cost, $50,000.

A plant is to be built at Camp Washington by M. L. Andrew & Co., Spring Garden Ave., machinists, which has had plans completed for Martin Fisher, Arch., 2156 Central Ave. The improvement is to be built at the southwest corner of Colerain Ave. and Alabama St. The principal building will be two stories, 160 × 40 ft., and adjacent to it will be a 1-story power-house, 28 × 22 ft.

DAYTON, OHIO.—Plans are completed by the People's Ry. Co. and work will be begun at once on the erection of a new car-house. The building will be located in Edgemont and its dimensions will be 250 × 180 ft. The cost of the building is estimated at $125,000. George C. Towle is Gen. Mgr., Dayton.

FILLMORE, IND.—The Foster Switch Co., recently incorporated, has ordered plans for plant to manufacture switches and switch blocks for railway tracks. Andrew F. Foster is Pres.; F. G. Hurst and Thomas Sheehan, Directors.

ELKHART, IND.—The Lake Shore & Michigan Southern R. R. intends erecting additional shops here. Samuel Rockwell, Cleveland, Ohio, is Ch. Engr.

GARY, IND.—The HARDIGAN CONSTRUCTION CO., of Indiana Harbor, has secured the contract, at $120,000, for grading and excavating for the American Bridge Co.'s proposed plant at Gary.

LA FAYETTE, IND.—Charles Murdock, of this city, Vice-Pres., announces that the Ft. Wayne & Wabash Valley Traction Co. will build car barns and repair shops here, estimated to cost $250,000. C. D. Emmons, Ft. Wayne, is Gen. Mgr.

FRANKFORT, IND.—The McDougall Co. has been incorporated, capitalized at $100,000. The company proposes to build and equip a large manufacturing plant in this city. Chas. P. McDougall, James W. Connaty, David F. Allen, F. S. Coulter and C. W. Moores, Dirs.

BUTLER, IND.—The Trebert Gas Engine Co. will build a factory in this city and remove its plant from Rochester, N. Y., it is stated.

NEWCASTLE, IND.—The National Spring Co., of St. John, N. B., has secured a site in this city and will build a factory plant thereon. Bids will be in order soon.

KENOSHA, WIS.—The Simmons Mfg. Co., manufacturer of iron and brass beds, etc., has increased its capital stock from $1,600,000 to $4,000,000 to cover proposed additions and improvements in factories here and elsewhere.

BELOIT, WIS.—A factory, costing approximately $500,000, will be built by the Berlin Machine Works next summer, it is stated. The plant will be devoted to the manufacture of sewing machinery. The location of the plant has not been decided upon, but will be near Beloit. At least 20 acres of ground will be needed for the site so as to take care of all present and future needs. The Berlin Machine Works is capitalized at $3,000,000.

MANITOWOC, WIS.—The Schreihart Brewing Co., Washington St., is having plans prepared for a malting plant and two elevators, to be erected in the spring of 1910. Probable cost, $100,000.

DULUTH, MINN.—Nelson Bros. will erect at 2105 West Superior St. a 2-story factory, 33 × 140 ft., to cost $30,000.

MINNEAPOLIS, MINN.—The Twin City Rapid Transit Co. has acquired property between Lake and 29th Sts., and proposes to erect there car houses and shops to cost about $450,000. L. S. Cairns, Minneapolis, is Gen. Supt.

ST. PAUL, MINN.—The American Insulating Co. intends to erect a plant here for the manufacture of insulating material. Gebhard Bohn is interested.

The Chicago "Record-Herald" states that Armour & Co., of Chicago, intend to establish a packing plant, covering several hundred acres of ground at New Brighton, a few miles from St. Paul, and that attorneys for the company have filed a deed and a $50,000,000 mortgage on the strip of land with W. A. Skag, Register of Deeds of Hennepin County.

KANSAS CITY, MO.—We are officially advisedthat the Kansas City Steel Scraper Mfg. Co., Heist Bldg., Kansas City, has been formed for the purpose of taking over and enlarging the business of the Slusser-McLean Scraper Co., of Sidney, Ohio. To this end, it has purchased thirty acres of ground at Steelton, Kansas City, and will erect a plant. This plant is to consist of eleven buildings of fireproof construction, having steel frames with brick walls, metal skylights and concrete floors. The approximate estimate of the cost of buildings and machinery is $750,000. No date has been set for opening proposals for either material or machinery. The daily capacity of this plant will be five carloads, besides the output of the car shops. R. C. Barnett is Consult. Engr.; Edwin M. Miller, Pres.; William T. McLean, Vice-Pres.; D. B. Wallis, Treas.; Amos Townsend, Secy.

SWEETWATER, TEX.—Railroad yards, shops and round-house will be built at Sweetwater by the Atchison, Topeka, & Santa Fe Ry. Co. W. B. Storey, Jr., Chicago, Ill., is Ch. Engr. A sum of $30,000 will be expended on the work.

SAN DIEGO, CAL.—The San Diego Elec. Ry. Co., Union Bldg., is taking bids for car barns to be erected on 15th and Sherman Sts. The chief engineer has drawn plans for a fireproof structure to be of concrete, 190 × 270 ft.; capacity, 100 cars, to enter on 15 tracks. The entire track area will be over a pit five ft. deep. The rails are to be of special make, supported by concrete piers placed at 8-ft. intervals. The roof will be of concrete, supported by concrete beams, one foot wide and 3 ins. deep, with a span of 35 ft. 6 ins. A steel water tank of 30,000 gallons capacity will be erected on the roof. Separated from the barn by a concrete fire wall will be the offices for the Superintendent, Transfer and waiting rooms and lavatories. The building will be electrically lighted. It will have fireproof doors and two systems of automatic sprinklers. Estimated cost, $100,000. B. M. Warner is Gen. Supt.

BLACK DIAMOND, CAL.—The Columbia Steel Works is to establish a plant at Black Diamond which will employ nearly 400 men. Twenty acres of land have been purchased from the Rancho Los Medanos. The tract is located directly east of the Bowers Rubber Co.'s factory and has a frontage of 800 ft. on New York Slough. The construction of a wharf approach to the foundry site is to commence immediately, the piles required being on hand. Rail connection with the site is afforded by a spur track. Surveyors are engaged in laying out the locations for the buildings of the steel plant. The structures will be steel framed. The Columbia Steel Co. recently was incorporated for $500,000 in Nevada by C. A. Hooper, C. M. Gunn, C. S. Cole, C. G. Dall, Sumner Crosby, A. M. Kidd and W. E. Creed. The concern has taken over the works and good will of the Columbia Steel Co., of Portland, Ore., and will move the plant of that concern to Black Diamond.

LONG BEACH, CAL.—OLIVER C. BRYANT, Delta Bldg., Los Angeles, Cal., has been awarded contract to construct a factory building at Long Beach, Cal., for the Los Angeles Switch & Signal Co. It is to be built on Anaheim Road. Cost, $14,000. Noted last week.

EUREKA, CAL.—C. A. Hooper, of the Hooper Lumber Co., Eureka, Cal., will erect a lumber and shingle mill south of Eureka. It will have a capacity of 8,000,000 ft. of lumber. He is applying for a franchise to build a street railway on F St. to connect with the Excelsior Co.'s wharf. If the franchise is granted, he intends to erect an electric power plant. He will install a modern sawmill on his lumber plant, the machinery to be run by electricity.

TONOPAH, NEV.—The station and shops of the Tonopah & Goldfield R. R. Co. at Bonanza, Nev., which were destroyed by fire recently, will be rebuilt. A round-house and repair shops will be added.

MONTREAL, QUE.—The Escanaba Mfg. Co. has decided to establish a branch plant in Canada. The factory will be located in the vicinity of Montreal, it is stated. Butter dishes, pie plates, clothespins and broom handles will be manufactured.

MONTREAL, QUE.—The Montreal St. Ry. Co. is about to begin the construction of its proposed shops north of St. Denis St., in the northern part of Montreal. The buildings will consist of a general electric repair shop, 200 × 200 ft.; car building shop, 200 × 200 ft.; machine shop, 200 × 200 ft.; blacksmith shop, 200 × 200 ft.; paint shop, 200 × 200 ft.; store shed, 100 × 100 ft., and an oil room275 × 75 ft. The total cost is estimated at $1,000,000, and the buildings will be laid out so that they may be extended from time to time. H. G. Taylor is Mech. Supt.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

DITCH.—Hartford City, Ind.—Bids will be received until Dec. 13, by Wm. Harley, County Surv., for constructing the Quinton and Stansburg ditch, Licking Township.

*DREDGING.—Michigan City, Ind.—Bids are asked until 11 a. m., Jan. 4, by Maj. Thomas H. Rees, Corps Engrs., U. S. A., Chicago, Ill., for dredging the harbor at Michigan City.

PIPE FENCES.—New York, N. Y.—Bids are asked by the Park Board until 3 p. m., Dec. 16, for furnishing and erecting three rail pipe fences in Mount Morris Park, Boro. of Manhattan. Henry Smith is Pres. Park Board.

DITCHES.—Webster City, Iowa.—Bids will be received by the County Auditor at Webster City until Dec. 15 for the construction of about 27 miles of main ditch and laterals in the Big Four Drainage District, situated in Hardin, Wright, Hamilton and Franklin Counties.

(Continued on p. 208.)

CONTRACT PRICES.

(*denotes that this work is advertised in Engineering News.)

*RESERVOIR.—New York, N. Y.—Bids were received by the Board of Water Supply on Nov. 24, for Contract No. 10, for the construction of the headworks of the Catskill Aqueduct, including the structure, for controlling, regulating and aerating the water leaving the Ashokan Reservoir, the principal of which are a lower gate-chamber, a screen chamber, an aerator, special and standard aqueducts in open cut, aggregating three-quarters of a mile in length; waste-weirs, a waste-channel, a concrete venturi meter and other appurtenances. The itemized bids were as follows: (A) Jules Breuchaud, 290 Broadway; (B) David Peoples, Bets Bldg., Philadelphia, Pa.; (C) G. W. Rogers, 29 Broadway.

Bids in detail were received as follows on Nov. 24 by the Board of Water Supply, for Contract 60, for the construction of the Hurley dikes of the Ashokan reservoir, known as Glenford, Woodstock and West Hurley dikes: (AA) MacArthur Bros. Co., 11 Pine St., New York; (BB) David Peoples; (CC) Jules Breuchaud; (DD) The Elmore & Hamilton Contracting Co., 4 Tweddle Bldg., Albany, N. Y.; (EE) P. J. Carlin Construction Co., 16 East 23d St., New York.

Contract 10—	(A)	(B)	(C)
50,000 cu. yds. removal of top-soil	$0.70	$0.50	$1.00
280,000 cu. yds. earth excavation	.68	.60	.85
90,000 cu. yds. rock excavation	2.50	3.00	2.75
20,000 cu. yds. refilling and embank. in gaps or depressions in Beaver Hill dikes	.60	.60	.70
165,000 cu. yds. refilling and embanking not included in Items 4 and 6	.20	.35	.15
38,000 cu. yds. surface dressing and grassing	.50	.50	.50
55,000 cu. yds. concrete masonry	5.80	5.50	5.60
8,000 cu. yds. reinforced-concrete masonry	8.00	9.00	7.00
50 cu. yds. grout of Portland cement	10.00	9.00	10.00
1,000 cu. yds. rubble masonry and paving in mortar	3.00	4.00	2.50
5,000 cu. yds. dry rubble masonry and paving	3.00	3.00	2.50
50 cu. yds. brick masonry	15.00	15.00	12.00
1,300 lin. ft. mortar lining for pipes	5.00	3.00	3.00
80,000 bbls Portland cement	1.50	1.65	1.60
50 tons c.-i. pipe and special pipe castings	50.00	100.00	75.00
260 tons semi-steel castings	85.00	100.00	150.00
500,000 lbs. steel for reinforcing concrete	.04	.04	.04
700,000 lbs. cast-iron, wrought iron and steel	.05	.05	.04
10,000 lbs. bronze	.45	.60	.80
2 small sluice-gates and gate-valves	100.00	100.00	60.00
1 venturi meter fittings	8,000.00	6,000.00	8,750.00
1,200,000 lbs. caring for and setting metal-work furnished by the city	.01	.04	.02
50,000 lbs. galvanizing	.01	.05	.02
1,000 cu. yds. crushed stone and gravel	1.25	2.50	2.00
3,000 lin. ft. vitrified pipe 10 ins. or less in diameter	.50	.75	.35
1,000 lin. ft. vitrified pipe larger than 10 ins. and not exceeding 18 ins. in diameter	1.25	1.50	.90
25 M. ft. B. M. timber and lumber	50.00	50.00	70.00
Testing 8 portions of aqueduct, per portion	500.00	700.00	900.00
1,000 lin. ft. of excavation, testing portions of aqueduct exceeding 200 ft. in length	2.00	2.00	4.00
Cleaning up, lump sum	1,000.00	4,000.00	5,000.00
Total	$1,146,600	$1,237,150	$1,242,770

Bond required, $280,000. Time, 60 months.

Contract 60—	(AA)	(BB)	(CC)	(DD)	(EE)
31 acres clearing and stripping	$700.00	$1,000.00	$1,000.00	$1,000.00	$1,500.00
55,000 cu. yds. earth excavation	1.40	.90	.95	.90	.40
8,000 cu. yds. rock excavation	3.00	4.00	.95	2.25	1.00
900,000 cu. yds. refilling and embanking	.50	.50	.62	.62	.70
50,000 cu. yds. surface dressing and grassing	.50	.75	.30	.50	.40
30,000 cu. yds. dry rubble masonry and paving	2.00	3.00	2.50	2.50	5.00
100 cu. yds. rubble masonry and paving in mortar	3.00	4.50	4.00	4.50	6.00
45,000 cu. yds. concrete masonry	4.75	5.10	5.00	4.75	4.00
1,000 cu. ft. grout	8.00	.50	.10	.50	.60
60,000 bbls. Portland cement	1.40	1.65	1.40	1.60	1.65
2,500 cu. yds. crushed stone and gravel	1.25	2.00	1.25	1.25	1.80
500 lin. ft. drilling small holes in rock or masonry	.70	1.00	.10	.50	2.00
6,000 lbs. miscellaneous cast iron, wrought iron and steel	.10	.09	.05	.08	.10
3,000 lin. ft. vitrified pipe	.55	.75	.60	.60	1.00
30 M. ft. B. M. timber and lumber	60.00	50.00	50.00	50.00	40.00
Total	$97,275	$1,029,240	$1,055,125	$1,074,355	$1,167,000

Bond required: $250,000. Time: 24 to 36 months.

ADDITIONS TO DREDGE.—Portland, Ore.—Bids are asked by Capt. Arthur Williams, Corps Engrs., U. S. A., Portland, until 11 a. m., Dec. 22, for making alterations in and additions to U. S. dredge "Chinook."

GRASS SOD.—New York, N. Y.—Bids are asked by the Park Board until 3 p. m., Dec. 16, for furnishing and delivering 107,000 sq. ft. of grass sod on the Broadway plots, Boro. of Manhattan. Henry Smith is Pres. Park Bd.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked by the Bureau of Supplies and Accounts, Navy Dept., until Dec. 14, for supplies as follows: Mare Island, Cal., or Brooklyn, N. Y.—Schedule 1955. 50 hydrants; Schedule 1958, 680 galvanized iron sheaves, 30 I-beam trolleys, twelve hydraulic jacks; Schedule 1960: twelve pneumatic turbine tube cleaners. Mare Island—Schedule 1959: 15,000 lbs. pig lead, 10,000 lbs. medium cut steel. Applications for proposals should designate the schedules desired by number.

*CONCRETE SIDEWALKS.—Paducah, Ky. Bids were received on Nov. 23 by the Board of Public Works for constructing concrete sidewalks, granite curbing, concrete gutters, concrete driveways, c.-i. drain pipe, etc. Work is to be completed as early in the spring of 1910 as weather will permit and is to be completed on or before Oct. 1, 1910. Itemized bids are as follows: (A) M. H. Weikel, Paducah; (B) A. T. MILLER, Lynchburg, Va. (awarded contract); (C) Bigler Bros., Goldsboro, N. C.; (D) Wilcox & Caldwell, Paducah; (E) W. Y. Noble, Paducah; (F) Meacham Contracting Co., Hopkinsville, Ky.; (G) George A. Gardner, Paducah; (H) George W. Katterjohn, Paducah; (I) J. D. McGee, Augusta, Ga.; (J) Charles L. Robertson, Paducah; (K) Yancey & Johnson, Paducah; (L) A. C. Butterworth, St. Louis, Mo., (M) W. M. Leftwich Co., Nashville, Tenn.; (N) Thomas J. Sale, Enid, Okla.; L. A. Washington is City Engr.:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
97,390 sq. ft. *concrete sidewalk, 4" thick with ¾" floating top; 1½ part sand to 1 part cement; concrete, 1:2½:5	$0.12½	$0.11½	$0.12½	$0.13	$0.11½	$0.12⁷/₁₀	$0.13½	$0.12⁹/₁₀	$0.11⁹/₁₀	$0.15	$0.15¾	$0.16½	$0.12⁷/₁₀	$0.10¾
7,210 sq. ft. concrete driveways, 6" thick; 1" floating top with 6" foundation of screened gravel; floating coat 1½ parts sand to 1 part cement; concrete, 1:2:4	.18	.14	.14¾	.18	.28	.15	.19½	.17	.15	.22½	.22	.22½	.16½	14¾
17,600 lin. ft. 6" × 14", set on 6" thick, 12" wide concrete base; 1:2½:5	.85	.81	.76	.79½	.84	.86	.81	.79⁴/₁₀	.80	.90	.93½	1.08	.81½	89¾
17,580 lin. ft. concrete gutter, 8" × 18" wide; 1" floating coat: same as driveways; concrete, 1:2:4	.28	.25	.35	.30	.30	.27	.31	.26	.37½	.41	.24½	.41	.25½	21¾
1,326 lin. ft. cast-iron pipe (4" soil cast-iron pipe), set in place; running under sidewalk through curbing for yard drainage; this price includes cutting hole in curb	.35	.20	.30	.35	.29	.18	.23	.29½	.30	.25	.20	.55	.27	.20
Total	$33,954	$31,201	$33,286	$33,816	$33,696	$32,361	$35,602	$32,472	$33,075	$39,754	$38,771	$40,724	$31,984	$31,562

*This includes excavation.

MISCELLANEOUS CONTRACTS.

(Continued from p. 207.)

LUMBER PILES.—New York, N. Y.—Bids are asked until noon, Dec. 16, by the Department of Docks and Ferries, on Contract No. 1206, for furnishing all the labor and materials required for furnishing and delivering lumber and piles.

LEVEE.—Helena, Ark.—Bids were received by the Commissioners of Cotton Belt Levee District No. 1 on Nov. 24, for construction of 100,000 cu. yds. of levee work. Contract has been awarded to ROACH & STANSELL, Memphis, Tenn., at 17.8 cts. per cu. yd.

LEVEE.—Charleston, Mo.—Bids will be received until Dec. 31 (extension of date from Nov. 27) by N. B. Kavenaugh, Secy., Levee Board, at Charleston, for constructing eight miles of levee in Scott County, about 175,000 cu. yds. A. J. Wheeler, Engr., Charleston. Noted on Nov. 18.

DITCHES.—Tallulah, La.—Bids were received on Nov. 20 for the construction work of the Canal Bayou Drainage District of Madison Parish, La. The work includes two separate ditches and totals about 300,000 cu. yds. W. M. Sherwood bid 12½ cts. per cu. yd. G. P. Blair is Pres. Levee Bd., Tallulah.

PIER.—New York, N. Y.—Bids are asked by the Department of Docks and Ferries until noon, Dec. 13, on Contract No. 1202: For furnishing all the labor and materials required for preparing for and building a new pier at the foot of 33d St., Boro. of Brooklyn, to be known as the 33d St. pier. Allen N. Spooner, Comr.

CANALS.—Tallahassee, Fla.—Bids will be received until Dec. 22 by Gov. A. W. Gilchrist, Chn. of Trustees of International Improvement Fund of Florida, Tallahassee, for excavating canals in the Everglades Drainage District, requiring the excavation of 300 lineal miles of canal, 40 to 100 ft. wide, and 6 to 10 ft. deep.

STEAMER.—New York, N. Y.—Bids were received by John T. Barry, Comr. of Correction, on Dec. 2, for furnishing all the labor and materials required for construction and completion of a 72-ft. single-screw steamer. The contract has been let to WATERS-GILDERSLEEVE-COLVER CO., New West Brighton, at $18,560.

*ROLLERS.—Jacksonville, Fla.—Bids are asked by F. J. Hyde, Chn. of Bd. of County Comrs. of Duval County at the Court House, Jacksonville, Fla., until 9.30 a. m., Dec. 24, for two 7-ton standard gasoline rollers. Bids to be for rollers delivered on the work in Duval County. Gail L. Barnard is County Engr., Jacksonville.

DREDGING.—St. Paul, Minn.—Bids will be received until Dec. 9 by the Board of County Commissioners, St. Paul, for dredging and improving Silver Lake, North St. Paul. The work will be divided into stations and marked Bays Nos. 1 2, 3 and 4. Bids on each bay are to be submitted separately. Edw. G. Krahmer is County Audr.

DRIP PANS.—New York, N. Y.—Bids were received by J. W. Stevenson, Bridge Comr., on Nov. 18, for constructing drip pans under the Manhattan approach of the Williamsburg Bridge and the contract has been awarded to CHARLES MEADS & CO., 299 Broadway, at $23,230. A complete list of bidders was given on Nov. 25.

*CHANNEL.—Baltimore, Md.—Bids were received by Maj. W. E. Craighill, Corps Engrs., U. S. A., on Nov. 30, for dredging approximately 400,000 cu. yds. in Chesapeake Bay, York Spit section of channel to Baltimore, Md. The only bidder was The Maryland Dredging & Contracting Co., Fidelity Bldg., Baltimore, at 23 cts. per cu. yd.

*DITCH.—Celina, Ohio.—L. L. Marsh, County Engr., will let, at public outcry, in the County Commissioners' Office, Celina, Ohio, at 11 a. m., Dec. 22, the work of constructing the Beaver Ditch. The approximate estimate of earth and rock to be removed from the ditch, 600,000 cu. yds. Length of ditch, about 15 miles. J. L. Morrow is County Audr.

CEMENT.—Providence, R. I.—Bids are asked by the Board of Contract and Supply, until 2 p. m., Dec. 21, for all the cement needed by the city for its sewer, water, highway and bridge departments during the season of 1910, delivered as required upon the work, not to exceed 20,000 bbls. of Portland cement and 1,500 bbls. of natural cement. Henry Fletcher is Mayor and Chn. of Bd.

LEVEE.—Helena, Ark.—Bids were received by the Commissioners of Cotton Belt Levee District No. 1, Greenfield Quaries, Secy., on Nov. 25 for construction of 100,000 cu. yds. of levee work, land side enlargement, four and five feet on old bank which is from 13 to 14 ft.: Roach & Stansell, Memphis, Tenn., 17.80 cts.; R. L. Leonard, Memphis, 18 cts.; Lawrence Bros., Memphis, 19.20 cts.; R. L. Chisbin, Memphis, 19.90 cts.; W. L. Mosby, Memphis, 21.7 cts. Roach & Stansell bid on this work Nov 24, for Patrick McCadden, of Memphis. John M. Quarles, Helena, is Engr.

FIRE APPARATUS.—Washington D. C.—Bids were received as follows on Dec. 1, by the Depot Quartermaster, Washington, for furnishing fire apparatus for various posts. The names and prices of the lowest bidders only are given and only on the principal items: 34 chemical engines: American La France Fire Engine Co., Elmira, N. Y., $474.50 each; eleven gasoline engines: Howe Engine Co., Indianapolis, $1,220 each; 24 hook and ladder trucks: Waters Engine Works Co., St. Louis, $275 each; 31,380 ft. hose: Eureka Fire Hose Co., New York $30 per length; one hose wagon and chemical engine: Robinson Fire Apparatus Mfg. Co., St. Loius, $1,089.

JETTY WORK.—Dallas, Tex.—Bids were received as follows by Capt. A. E. Waldron, Corps Engrs., U. S. A., Dallas, on Nov. 27, for jetty work at Sabine Pass, Tex.: (a) Transferring 1,800 granite blocks, (b) placing 13,000 tons of riprap, (c) placing 12,000 cu. yds. concrete, (d) total: Peter Eskold, Biloxi, Miss., and Lester F. Alexander, Pilot Town, La., (a) $18,000, (b) $47,450, (c) $91,800, (d) $157,250; David M. Picton & Co., Galveston, Tex., (a) $8,946, (b) $38,610, (c) $87,600, (d) $135,156; Charles Clarke & Co., Galveston, Tex., (a) $10,800, (b) $36,400, (c) $93,000, (d) $140,200; The John T. Ireland Co., Port Arthur, Tex., (a) $9,000, (b) $38,350, (c) $110,000, (d) $157,390.

DREDGING AND QUAY WALLS.—New York, N. Y.—Bids are asked by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Jan. 8, for dredging and opening through Cob Dock and constructing quay walls at the Navy Yard, New York. Specifications are on file at the office of Engineering News, New York.

DREDGING.—New York, N. Y.—Bids were received as follows on Dec. 4 by the Bureau of Yards and Docks, Navy Department, Washington, for dredging at the U. S. Navy Yard, New York: Coastwise Dredging Co., Bank of Commerce Bldg., Norfolk, Va., 31 cts.; R. G. Packard Co., 130 Pearl St., New York, N. Y., 22⅜ cts.; The International Contracting Co., 17 Battery Pl., New York, N. Y., 17.8 cts.; Atlantic Dredging Co., 15 Whitehall St., New York, N. Y., 42.7 cts.; Maritime Dredging Co., 78 Broad St., New York, N. Y., 43 cts.; P. Sanford Ross, Inc., 277 Washington St., Jersey City, N. J., 29.8 cts.; Taylor Dredging Co., 21 State St., New York, N. Y., 17.9 cts.; J. S. Packard Dredging Co., 31 Market Sq., Providence, R. I., 26.94 cts.; The W. H. Beard Dredging Co., 21 State St.; New York, N. Y., 37½ cts.; Morris & Cumings Dredging Co., 17 State St., New York, N. Y., 38²/₁₁ cts.

FIRE HOSE.—Washington, D. C.—Bids were received on Dec. 1 by the Commissioners of the District of Columbia for furnishing 15,000 ft. of 2½-in. cotton-covered rubber-lined hose during the remaining portion of the fiscal year ending June 30, 1910, as follows: The C. C. C. Fire Hose Co., Canton Junction, Mass., 94.8 cts. per ft.; time, 60 working days. B. F. Goodrich Co., Akron, Ohio, $10,350. Eureka Fire Hose Co., 13 Barclay St., New York, $15,000; time, 30 days; alternate if high pressure hose is used, $16,500. Gutta Percha & Rubber Mfg. Co., 126 Duane St., New York, Baker hose, $1.10 per ft.; time, six months. National Electrical Supply Co., 1330 New York Ave., Washington, D. C., for Boston woven hose, 90 cts. per ft., and for Cambridge bracket hose, 90 cts. per ft.; time, 60 days. The Fabric Fire Hose Co., Duane and Church St., New York, $15,000. Voorhees Rubber Mfg. Co., 48 Dey St., New York, $13,500. The Diamond Rubber Co., 1876 Broadway, New York, $11,025.

BARGE CANAL.—Albany, N. Y.—Bids were received by F. C. Stevens, Supt. Public Works, on Dec. 1, for five additional Barge Canal contracts as follows: Contract No. 36, providing 16 winches for movable dams; Contract No. 54, for constructing Lock No. 7 at Fort Edward; Contract No. 69, for constructing in the Hudson River Lock No. 2 below Mechanicville, together with all appertaining construction; Contract No. 72, for dredging a channel in the Hudson River and performing work incident thereto from Lock No. 2 to Lock No. 4, a distance of 4.1 miles; and Contract No. 2E, for completing the construction of the canal from the Mohawk River at Waterford to a point about one-fourth of a mile above the head of Lock No. 3. The bids were.

Contract No. 36: Engineer's estimate: 16 winches, each $4,500, total, $72,000; Charles Longenecker & Co., 150 Nassau St., New York: each $6,625, total $106,000. Lidgerwood Mfg. Co., 90 Liberty St., New York, each $5,220; total $83,500. J. D. Miller, 39 Cortlandt St., New York, each $2,800; total $44,800. Elliott Machine Co., Baltimore, Md., each $3,731; total $59,696. Contractors Plant Mfg. Co., 129 Erie St., Buffalo, each $4,895; total $78,320; Brown Hoisting Machinery Co., Cleveland, O., each $4,850; total $69,600. New Jersey Foundry & Machine Co., 90 West St., New York, each $3,029; total, $49,264. Mead-Morrison Mfg. Co., 149 Broadway, New York, each $4,945; total, $79,220.

Contract No. 54: SCOTT BROTHERS, Baldwinsville, N. Y., $250,590 (awarded contract); Engineer's estimate, $232,908.

Contract No. 69: I. A. HODGE & CO., INC., Syracuse, N. Y., $240,061 (awarded contract); Parker & Beebe, Waterford, N. Y., $270,000; Coast & Interior Contracting Co., Fayetteville, N. Y., $250,697; Arthur McMullen, 149 Broadway, New York, $249,939; Morris Kantrowitz, Albany, N. Y., $291,556; Scott Bros., Baldwinsville, N. Y., $243,634; Engineer's estimate, $270,675.

Contract No. 72: SHANLEY-MORRISSEY, INC., 527 Fifth Ave., New York, $1,192,758 (awarded contract); P. Sanford Ross, Inc., 277 Washington St., Jersey City, N. J., $1,-904,983; Engineer's estimate, $1,439,733.

Contract No. 2E. HOLLER & SHEPARD, 414 Ellwanger & Barry Bldg., Rochester, N. Y., $261,668 (awarded contract); Ferguson Contracting Co., 37 Wall St., New York, $266,471; Scott Bros., Baldwinsville, N. Y., $280,101; Engineer's estimate $263,189. Frank M. Williams is State Engr. and Surveyor. Itemized bids will be given next week under Contract Prices.

Specifications and Contracts

By J. A. L. WADDELL and J. C. WAIT

A valuable book on this important subject at a small cost.

Price, $1.00 net

ENGINEERING NEWS

220 Broadway New York

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 208.

SEWER CONSTRUCTION.

OFFICE OF COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY.
Incorporated.

Sealed proposals for the construction of Section "F" Beargrass Intercepter, Contract No. 60, will be received at the office of the Commissioners of Sewerage, 605 Equitable Building, Louisville, Ky., until 12 o'clock noon, December 31st, 1909.

The work consists mainly of the construction of about 3,188 ft. of reinforced concrete sewer, diameters 39" and 33", including 3,188 feet of earth excavation, average cut about 21.2 feet, about 750 cu. yds. of concrete, and about 64,200 lbs. of steel.

Plans and specifications may be seen at the office of the Commissioners, and at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon St., Boston, Mass.

Sealed bids should be endorsed "Proposal for Section "F" "Beargrass Intercepter," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "Bidder's Bond," as described in the form of proposal.

P. L. ATHERTON,
Chairman.

CHAS, P. WEAVER, Secy. & Treas.
J. B. F. BREED, Chief Engineer.

SEWER.

Joplin, Mo., Dec. 7th, 1909.

By Order of the Council of the City of Joplin, Missouri, at a regular session thereof, on November 9th, 1909, the City Clerk, O. E. Lichliter, will receive bids for the construction of the West Joplin Public Sanitary Sewer, including the "D" Street and Smelter Hill Public Sanitary Sewers, in the City of Joplin, Missouri, according to the estimate, specifications, plans, detail drawings and instructions to bidders, for the construction of said sewers, made by the City Engineer, J. B. Hodgdon, and now on file in the office of the City Clerk, till Tuesday, December 28th, 1909, at five (5) o'clock P. M.

Contractors desiring to bid on the above work will be furnished with a complete set of proposal, specifications, maps and profiles and detail drawings, with instructions to bidder, on application, by sending with the application a Post Office Money Order to the amount of Five ($5.00) Dollars, payable to J. B. Hodgdon, City Engineer.

Length of West Joplin Public Sanitary Sewer, about 22,000 ft.

Length of "D" Street Public Sanitary Sewer, about 1,844 ft.

Length of Smelter Hill Public Sanitary Sewer, about 5,989 ft.

Approved by the Council December 7th, 1909.

GUY. T. HUMES,
Mayor.

Attest:
O. E. Lichliter, City Clerk.

MACADAM ROADS.

Lenoir, N. C.

Sealed proposals for grading and macadamizing about three miles of road near Lenoir, N. C., and macadamizing three additional miles to be graded by the company, will be received by the Lenoir & Blowing Rock Turnpike Company, of Lenoir, N. C., until 7 o'clock P. M., January 5th, 1910.

Specifications and blank forms will be sent upon application. Plans and profiles can be seen at the office of the company. Each proposal must be accompanied by a certified check of Five Hundred Dollars made payable to G. L. Bernhardt, President, as evidence of good faith upon the part of the bidder.

The company reserves the right to reject any or all bids.

R. L. GWYN,
Sec. & Treas.

C. M. MILLER, Engineer,
Salisbury, N. C.

SEWER.

OFFICE OF COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY.
Incorporated.

Sealed proposals for the construction of a sewer known as the Jane Street Sewer, Contract No. 59, of the Comprehensive System of Sewerage for the City of Louisville, Ky., will be received at the office of the Commissioners of Sewerage until 12 o'clock noon, December 24th, 1909.

The work will consist mainly of building a combination sewer and drain 8" to 33" diameter, total length about 3,460 ft., and from 4 to 17 ft. deep, and including about 1,300 cu. yds. of rock excavation, 700 cu. yds. of concrete and 5,700 feet of vitrified pipe from 8" to 24" diameter.

Plans and specifications may be seen at the office of the Commissioners, and at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon St., Boston, Mass.

Sealed bids should be endorsed "Proposal for Jane St. Sewer," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "Bidder's Bond" as described in the form of proposal.

P. L. ATHERTON,
Chairman.

CHAS, P. WEAVER, Secy. & Treas.
J. B. F. BREED, Chief Engineer.

MECHANICAL FURNACE EQUIPMENTS.

OFFICE BOARD OF PUBLIC WORKS.
Grand Rapids, Mich., Dec. 2, 1909.

Sealed proposals will be received at the office of the board until Dec. 16, 1909, at 8.00 p. m., for furnishing, constructing and erecting Mechanical Furnace Equipments for two Boilers at the Combination Pumping and Lighting Plant in the City of Grand Rapids, Mich., according to the plans and specifications on file at the office of the Board.

Proposals not made in duplicate will be rejected.

The Board reserves the right to reject any or all bids.

Each bidder shall deposit with his proposal a certified check or certificate of deposit payable to the order of Wm. M. Gormley, President, in the sum of 5 per cent. of his proposal, but not less than $50.00, to be forfeited to the City of Grand Rapids in case he shall fail to enter into contract, in accordance with his proposal, should his proposal be accepted by the Board of Public Works.

All proposals must be made upon blanks that will be furnished upon application at the office of the Board. By order of the Board.

WM. M. GORMLEY, President.
Attest: SAMUEL A. FRESHNEY,
Secretary and General Manager.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., December 4, 1909.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 18th day of January, 1910, and then opened, for the construction (complete) of the extension to the U. S. Post Office and Court House at Manchester, N. H., in accordance with the drawings and specifications, copies of which may be had at this office or at the office of the Custodian at Manchester, N. H. at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

Situations Open

WANTED, by a large manufacturing company, an experienced crane erector. Permanent position for right man. State age, experience and salary expected. Address "A. B. 24," Engineering News, New York. 24-11

FOR SALE

FOR SALE

General Engineering Practice

Good paying proposition. Complete outfit. Central Florida.

Address "C. B. 24," Engineering News, New York. 24-11